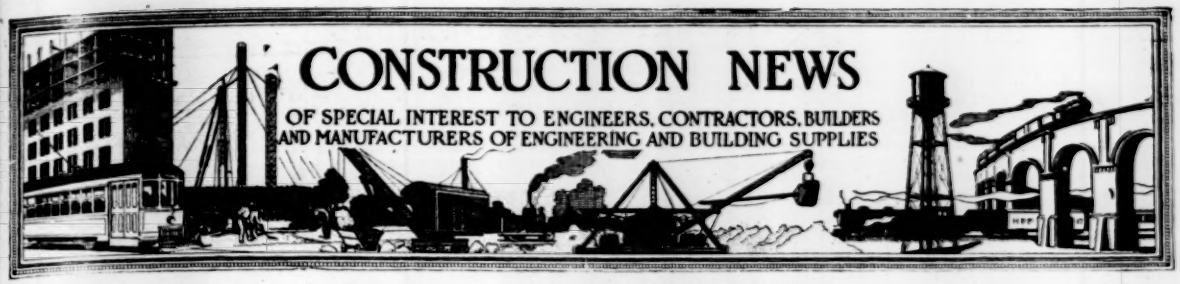
CONSTRUCTION NEWS
OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS
AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by **heavy type**; declines by *italics*.

PIG IRON—

	Current	One Month Ago
CINCINNATI		
No. 2 Southern	*$30.35*	$37.60
Northern Basic	*27.55*	31.80
Southern Ohio No. 2	*28.55*	32.80
NEW YORK, Tidewater delivery		
2X Virginia (silicon 2.25 to 2.75)	*32.40*	36.15
Southern No. 2 (Silicon 2.25 to 2.75)	*34.70*	39.95
BIRMINGHAM		
No. 2 Foundry	*25.75*	31.00
PHILADELPHIA		
Eastern Pa. 2X (silicon 2.25 to 2.75)	*31.90**	36.15*
Virginia No. 2	*33.25†*	38.10†
Basic	*29.65**	33.90*
Grey Forge	*29.65**	33.90*
CHICAGO		
No. 2 Foundry Local	*26.75*	31.00
No. 2 Foundry Southern	*33.00*	37.25
PITTSBURGH, including freight charge from the Valley		
No. 2 Foundry Valley	*26.25*	31.00
Basic	*25.75*	30.00
Bessemer	*29.35*	33.60

* F.o.b. furnace. † Delivered

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per ton f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Current	One Year Ago	Current	One Year Ago
Standard bessemer rails	*$45.00*	$55.00	*$45.00*	$65.00
Standard openhearth rails	*47.00*	57.00	*47.00*	67.00
Light rails, 8 to 10 lb.	*2.58½**	3.13½*	*2.83½**	3.13½*
Light rails, 12 to 14 lb.	*2.54**	3.09*	*2.79**	3.09*
Light rails, 25 to 45 lb.	*2.45**	3.00*	*2.70**	3.00*

* Per 100 lb.

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots together with the warehouse prices at the places named:

	Pittsburgh				
	Current	One Year Ago	Chicago	St. Louis	San Francisco
Standard spikes, ⅝-in. and larger	*$3.25*	$3.90	*$4.27*	$5.04	$6.15
Track bolts	4.90	4.90	*5.17*	Premium	*7.20*
Standard section angle bars	3.00	3.25	*4.22*	Premium	*4.95*

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

		7 In. x 9 In. by 8 Ft.	6 In. x 8 In. by 8 Ft.
Chicago	Plain	$1.48	$1.33
San Francisco	Douglas Fir—Green	1.35	.96
San Francisco	Douglas Fir—Creosoted	2.70	1.92

Prices per tie at Missouri mills; St. Louis prices about 25c. higher:

Untreated A Grade White Oak 6x8x8		Untreated A Grade Red Oak 6x8x8	
No. 1	$0.70	No. 1	$0.55
No. 2	.80	No. 2	.65
No. 3	.90	No. 3	.75
No. 4	.98		
7x9x8 white oak			1.05
7x9x8 red oak (No. 4)	$0.80	No. 5	.87

Note:—Add 36c. each for treatment.

PIPE

STEEL—From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¼ to 3 in. butt welded	47%	46½%	45%
2½ to 6 in. lap welded	42%	42½%	41½%
	Galvanized		
	New York	Chicago	St. Louis
¼ to 3 in. butt welded	*31%*	*31%*	*30½%*
2½ to 6 in. lap welded	*27%*	*27½%*	*27½%*

Malleable fittings, Class B and C, from New York stock sell at +15% list prices. Cast iron, standard sizes, 10% off.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York						
	Current	One Month Ago	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4 in.	*$60.70*	$65.70	$58.35	*$59.80*	$53.00	$82.55	*$65.00*
6 in. and over	*57.70*	62.70	55.35	*56.80*	50.00	79.55	*62.00*

Gas pipe and 16-ft. lengths are $1 per ton extra.

CLAY DRAIN TILE—The following prices are per 1000 lin. ft.:

	New York					
Size, In.	Current	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$35.00	$22.50	$30.00	.....	33.44
4	51.00	51.00	27.00	40.00	$45.00	50.16
5	65.00	65.00	45.00	50.00	65.00	62.70
6	90.00	90.00	55.00	60.00	90.00	83.60
8	130.00	130.00	100.00	80.80	150.00	143.76

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	Current	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	*$0.09*	$0.096	.....	$0.125	$0.09	$0.132
4	*.09*	.096	.....	.125	.15	.132
5	*.135*	.144	.....	.175	.1875	.207
6	*.135*	.144	$0.16	.175	.225	.207
8	*.21*	.224	*.21*	.25	.3475	.2875
10	*.315*	.336	*.29*	.375	.45	.4025
12	*.405*	.432	*.37*	.475	.60	.5175
15	*.54*	.576	*.56*	.63	.9375	.7475
18	*.75*	.80	*.91*	1.00	1.275	.9775
20	*.90*	.96	1.14	1.20	1.71	1.15
22	*1.20*	1.28	1.46	1.60	.....	1.495
24	*1.485*	1.44	*1.56*	1.80	2.125	1.725
27	*2.145*	2.145	*1.90*	2.75	.....	2.5875
30	*2.376*	2.376	*2.57*	3.45	.....	3.1625
33	*3.15*	3.15	*3.09*	4.00	.....	4.025
36	*3.5875*	3.588	*3.37*	4.35	.....	4.60

	3	5	8	12	24	36
Boston	*$0.093*	*$0.1395*	*$0.217*	*$0.4186*	*$1.395*	*$4.6125*
St. Paul	.12	.18	.28	.45	2.00	4.75
Denver	*.10½**	*.16*	.25	*.42½*	*1.57½*	.....
Seattle	.15	.....	*.33½*	.64	2.00	.....
Kansas City	.12	.18	.25	.50	1.80	4.60
New Orleans			*52* per cent. off list			
Los Angeles	*.05½*	*.076*	*.136*	*.25*	*.90*	.....
Atlanta			*52* per cent. off list			

* 4-in.

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices per gallon in tank cars 8000 gal. minimum f.o.b. place named:

	Current	One Month Ago
New York, 45–65% asphalt	*$0.05½*	$0.06½
New York, liquid asphalt	*.07*	.07½
New York, binder	*.07½*	.07½
New York, flux	*.05½*	.06½
St. Louis, 40–50% asphalt	.06	.....
Chicago, 15–20% asphalt	.10	.10
Chicago, 100% dust layer	.11	.11
Dallas, 40-50% asphalt	.09	.09
Dallas, 60-70% asphalt	.10	.10
Dallas, 75-90% asphalt	.11	.11
San Francisco, 75-95% asphalt, per bbl.	2.10	2.10

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	*$22.00*	*$20.00*
Chicago	Mexican	35.50	33.50
San Francisco	California	17.00	13.75
Dallas	Texaco and Mexican	32.00	30.00
Seattle	D grade	23.10	.....
Denver	Trinidad	45.00	.....
Denver	California	38.00	.....
St. Paul	Stanolind	.....	26.00
Kansas City	Trinidad	32.50	.....
Kansas City	Mexican or Magnolia	25.00	22.00
Los Angeles	D grade	.....	13.50
St. Louis	Stanolind	*26.40*	*19.90*

PAVING STONE—

Chicago	About 4x8x4 dressed	2.70 sq.yd.
	About 4x8x4 common	2.35 sq.yd.
San Francisco	Basalt block 4x7x8	57.75 per M
Kansas City	Limestone	*2.75* sq.yd.
Boston	5-in. granite	109.00 per M
St. Paul	Sandstone	1.75 sq.yd.
Atlanta	Sta. No. 1 granite, quarry	55.00 per M
Salisbury, N. C.	Std. granite, quarry	62.50 per M

FLAGGING—

New York	Bronx	$0.20 sq.ft.
	Manhattan	.21 sq.ft.
	Queens, 5 ft. square	.20 sq.ft.
	5x20-in. cross-walk	.70 lin.ft.
Chicago	18 in. wide	.80 lin.ft.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$3.25
New York	4	16	3.50
Chicago	4	16	3.10
Chicago	3½	16	*2.95*
Chicago	City specifications		3.10
St. Louis	3½	16	*2.19*
St. Louis	4	16	*2.50*
St. Louis, Minneapolis spec.	3½	..	*1.94*
St. Louis, Minneapolis spec.	4	..	*2.25*
Seattle	4	16	2.55
Kansas City	4	16	3.00
St. Paul	Minneapolis specifications		*2.20*
Dallas	3½	18	3.17
Dallas	4	18	3.56

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Current	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Current	Gravel ¾ In. One Yr. Ago	Sand Current	Sand One Yr. Ago
New York	$2.00		$2.00		$1.25	
Denver	1.60	$1.50	1.60	$1.50	1.10	$1.05
Chicago	2.00	1.50		1.25	1.10	
Kansas City	2.50	2.15	3.00	2.60	1.00†	.90
St. Louis*	1.76	1.21	1.82	1.21	1.68	1.21
Seattle	1.25	.80	1.25	.80	1.25	.80
Dallas	2.25	2.00	2.25	2.00	1.35	1.40
St. Paul	1.25	1.00	1.35	1.40	.60	.50
San Francisco	1.15	1.00	1.15	1.00	1.15	1.00
Boston	1.70‡	1.90	1.70‡	2.00	.95‡	1.00
New Orleans	2.75	1.30	2.75	1.95	1.50	1.95
Atlanta	2.40	....	2.40	....	1.12	....
Los Angeles	1.02	....	1.02	....	.70	....

*Fine white sand, Pacific and Ottawa per ton, $6. †Kaw River sand is $1.50 per yd. ‡Per ton.

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Current	1½ In. One Year Ago	¾ In. Current	¾ In. One Year Ago
New York	$1.65–1.75	$1.60	$1.75–1.85	$1.75
Chicago	1.60	1.50	1.70	1.50
St. Louis	1.35	1.35	1.35	1.35
Dallas	2.25	1.51	2.25	1.55
San Francisco	1.15	1.00	1.15	1.00
Boston	3.00*	1.90	3.00*	2.00
St. Paul	1.15	1.00	1.25	1.10
Denver		1.50	1.60	1.50
Kansas City	1.70	1.60	1.80	1.70
Seattle		1.10	1.50	1.10
Atlanta	2.60	1.85	2.85	2.10
Los Angeles	1.12	....	1.12	....

*Per ton at crusher.

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$17.50	$14.50	$2.90	$2.65
Kansas City	22.80		2.35*	2.20*
Chicago	18.00	17.50	1.80*	1.10*
St. Louis	22.00	18.00	....	1.75*
Boston	22.50	18.25	3.65	3.30
Dallas	2.25*	1.25*	....	....
San Francisco	19.00	....	....	2.00†
St. Paul	25.00	19.50	1.97†	1.93†
New Orleans	....	1.90*	....	....
Atlanta	....	....	19.00‡	2.50*
Denver	....	....	26.25‡	2.50*
Los Angeles	....	3.05†	....	2.80†

* 200-lb. barrels. † Per 180-lb. barrel. ‡ Per ton.

NOTE—Refund of 10c. per barrel.

NATURAL CEMENT — Price to dealers for 500 bbl. or over, f.o.b., exclusive of bags:

St. Paul (Austin)	$1.63
Kansas City (Ft. Scott)	1.30
New Orleans	2.52

PORTLAND CEMENT—These prices are for barrels in carload lots, without bags, to contractors:

	Current	One Month Ago Without Bags	One Year Ago With Bags
New York	$2.45	$2.45	$2.55
Jersey City	2.62	2.62	2.50
Boston	2.57	2.57	2.87
Chicago	2.05	2.05	2.36
Pittsburgh	2.15	2.15	2.71
Cleveland	2.32	2.32	2.84
Detroit	2.28	2.28	2.80
Indianapolis	2.22	2.22	2.78
Toledo	2.22	2.22	2.80
Milwaukee	2.16	2.16	2.73
Duluth	2.20	2.20	2.91
Peoria	2.16	2.16	2.73
Cedar Rapids	2.28	2.28	2.88
Davenport	2.24	2.24	2.80
St. Louis	2.30	2.30	2.45
San Francisco	3.00	3.00	2.80
New Orleans	2.70	2.77	3.10
St. Paul	2.40	2.40	2.58
Denver	2.67	2.67	3.20
Kansas City	2.30	2.30	2.74
Seattle	2.13	2.13	3.25
Dallas	2.03	2.53	2.60
Atlanta	2.60	2.75	2.60
Cincinnati	No quotations	2.44	5.80a
Los Angeles	2.68	....	....

NOTE — Bag charge is generally 25c. each

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Ft.	Width	Pitts-burgh	New York	Chicago	St. Louis	Dallas	San Fran-cisco
032	0.032		$0.92	$1.09	$0.98	$1.03	$1.13	$1.36
049	0.049		1.18	1.40	1.26	1.32	1.43	1.72
068	0.068		1.44	1.73	1.53	1.64	1.79	3.15
093	0.093		1.85	2.23	1.97	2.11	2.41	2.77
126	0.126		2.28	2.82	2.43	2.67	2.92	3.50
153	0.153		2.72	3.38	2.90	3.19	3.48	4.18
180	0.180		3.12	3.85	3.33	3.66	3.99	.....
245	0.245		4.12	5.10	4.40	4.83	5.27	.....
287	0.287		4.76	5.90	5.08	5.58	6.10	7.31
336	0.336		5.58	6.83	5.89	6.47	7.06	.....
395	0.395		6.40	7.89	6.83	7.50	8.19	.....

PAVING

036P	0.036	$0.71	$0.84	$0.76	$0.80	$0.60
053P	0.053	1.00	1.25	1.06	1.12	1.12
072P	0.072	1.26	1.58	1.34	1.46	1.46
097P	0.097	1.62	1.98	1.73	1.88	1.88
049R	0.049	1.00	1.25	1.06	1.12	1.12
067R	0.067	1.26	1.53	1.34	1.46	1.46
089R	0.089	1.62	1.98	1.73	1.88	1.88

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

NOTE—New York Warehouse price is about 15% lower than given above, owing to mill decrease.

EXPANDED METAL LATH—Prices in carload lots per 100 yd. for painted are as follows:

Gage	Weight	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$34.07	$30.97	$31.00	$34.00	$38.00	$34.75
26	250	35.23	32.03	32.00	35.00	40.00	36.25
25	300	36.51	33.19	33.25		42.50	38.15
24	340	37.73	34.30	34.50	37.00	.....	40.10
22	450	40.48	36.80	.....	.....	.....	43.10

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING — The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Pittsburgh	New York Current	New York One Year Ago	Chicago	St. Louis	Dallas	San Francisco
½ and larger	$2.35	$3.37	$4.12	$3.37	$3.44	$4.75	$4.60
⅝	2.40	3.42	4.18	3.42	3.49	4.80	4.65
¾	2.45	3.47	4.23	3.47	3.54	4.90	4.70
⅞	2.60	3.62	4.38	3.62	3.69	5.00	4.85
1	2.85	3.87	4.62	3.87	3.94	5.25	5.10

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	St. Louis	Dallas		Chicago	St. Louis	Dallas
½ in. and larger	$2.45	$2.45	$4.75	½	$2.70	$2.70	$5.00
⅝	2.50	2.50	4.80	⅝	2.95		5.25
¾	2.55	2.55	4.90				

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Current	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$15.00	$15.00	$10.25	No Quotations	
Chicago	12.00	12.00	8.00		
St. Louis, selected	18.00	18.00	13.00	$26.00	
St. Louis, salmon	10.00*	12.00	9.00		
Denver	12.00†	12.00	8.50		
Dallas	16.07	16.07	11.00	26.50	
San Francisco	12.50	12.50	10.00		
Boston (on job)	18.00	18.00	13.50	30.00	45.50
New Orleans	18.00	15.98	12.00*	19.00	
St. Paul	10.25	10.25	8.35	30.00	37.50
Kansas City	14.00	14.00	11.00	36.00	
Seattle	15.00	15.00	10.00	36.00	
Atlanta	15.00	16.00	10.50	.....	35.00
Los Angeles	12.50				

* Hard brick, $16. † Salmon is $10.

HOLLOW TILE—Price per block in carload lots for hollow building tile:

	New York Current	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas	Factory Perth Amboy, N. J.
4x12x12	$0.11925*	$0.09	$0.08	$0.08	$0.1125	$0.1072	$0.1512
6x12x12	.159*	.12	.112	.105	.15	.1474	1944
8x12x12		.16	.144	.15	.....	.2010	2261
10x12x12		.....	.168	.173	.....	.2546	2781
12x12x12			.208	.208	.....	.3082	2916

*Additional charge for trucking.

	4x12x12	8x12x12	12x12x12
Boston	$0.11	$0.21	$0.30
St. Paul	.056	.11	162
Kansas City	.0786	15	205
Denver	.12½	.18	25
Seattle	.09	.175	.30
Atlanta	.10	.13½	.21
Los Angeles	.082	.154	216
New Orleans	.17	.23	.34

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Mill Pitts-burgh	New York Cur-rent	New York 1 Yr. Ago	St. Louis	Chi-cago	San Fran-cisco	Dallas
Beams, 3 to 15 in.	$2.45	$3.47	$4.195	$3.39	$3.47	$4.70	$5.55
Channels, 3 to 15 in.	2.45	3.47	4.195	3.39	3.47	4.70	5.85
Angles, 3 to 6 in., ¼ in. thick	2.45	3.47	4.195	3.39	3.47	4.70	5.85
Tees, 3 in. and larger	2.45	3.52	4.195	3.39	3.47	4.70	5.85
Plates	2.66	3.67	4.445	3.39	3.67	4.90	5.45

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	New York—Warehouse Current	New York—Warehouse One Yr. Ago	Chi-cago	St. Louis	San Fran-cisco	Dallas
½ in. and larger	$4.20	$5.05	$6.095	$4.87	$4.94	$6.70	$6.75
CONE HEAD BOILER							
½ in. and larger	4.30	5.15	6.195	4.97	5.04	6.80	6.75
⅝ and ¾	4.45	5.30	6.345	5.12	5.19	6.95	6.90
⅞ and 1	4.70	5.55	6.695	5.47	5.44	7.30	7.15

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	$1.35	$1.60	$1.70	$1.95	$2.05	$2.30
No. 2 grade	1.20	1.45	1.50	1.75	1.80	2.05

Asbestos asphalt-saturated felt (14 lb. per square) costs $5.00 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $2.10 per roll in carload lots and $2.35 for smaller quantities.

Shingles, red and green slate finish, cost $5.50 per suare in carloads, 5.75 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York and Chicago:

	Carload Lots		Less Than Carload Lots	
	N. Y.	Chicago	N. Y.	Chicago
Tar felt (14 lb. per square of 100 sq. ft.)	$52.00	$52.50	$53.00	$53.50
Tar pitch (in 400-lb. bbl.)	19.00	16.00	20.00	17.00
Asphalt pitch (in barrels)	36.00	36.00	41.50	41.50
Asphalt felt	67.50	67.50	72.00	72.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

Blue Annealed	Large Mill Lots Pittsburgh	St. Louis	Chicago	San Francisco	—New York— Current	One Yr. Ago
No. 10	3.55	4.29	4.57	5.80	4.57	5.45
No. 12	3.60	4.34	4.62	5.85	4.62	5.50
No. 14	3.65	4.39	4.67	5.90	4.67	5.55
Black						
Nos. 18 and 20	4.15	5.04	5.17	6.75	5.42	6.25
Nos. 22 and 24	4.20	5.14	5.22	6.80	5.47	6.30
No. 26	4.25	5.19	5.27	6.95	5.52	6.40
No. 28	4.35	5.29	5.37	7.05	5.62	6.45
Galvanized						
No. 10	4.70	5.64	5.72	....	5.97	6.70
No. 12	4.80	5.64	5.82	7.30	6.02	6.80
No. 14	4.80	5.64	5.82	7.30	6.07	6.80
Nos. 18 and 20	5.10	5.84	6.12	7.60	6.37	7.10
Nos. 22 and 24	5.25	5.99	6.25	7.75	6.52	7.25
No. 26	5.40	5.69	6.42	7.90	6.67	7.40
No. 28	5.70	6.44	6.72	8.20	6.97	7.70

LINSEED OIL—These prices are per gallon:

	—New York— Current	One Year Ago	—Cleveland— Current	One Year Ago	—Chicago— Current	One Year Ago
Raw in barrel	$1.55	$1.55	$1.68	$1.65	$1.66	$1.65
5-gal. cans	1.70	1.65	1.85	1.80	1.86	1.75

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Current Dry	Red Current In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Current Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	13.00	14.50	11.25	11.00	13.00	10.50
25 and 50-lb. kegs	13.25	14.75	11.50	11.25	13.25	10.75
12½-lb. keg	13.50	15.00	11.75	11.50	13.50	11.00
5-lb. cans	15.00	16.50	13.25	13.00	15.00	13.00
1-lb. cans	16.00	17.50	13.25	13.00	16.00	13.00

500 lb. lots less 10% discount; 2000 lb. lots less 10–2½% discount.

LUMBER

San Francisco—Prices of rough Douglas fir, No. 1 common, in more than carload lots:

	Lumber Prices in Yards at San Francisco 6-8-12 and 14 Ft.	10-16-18 and 20 Ft.	22 and 24 Ft.	25 to 32 Ft.
3x3 and 4	$26.00	$26.50	$27.50	$29.50
3x6 and 8	27.00	27.50	28.50	30.50
4x4-6 and 8	28.50	29.50	30.50	32.50
3x10 and 12	27.50	28.50	29.50	31.50
3x14	28.00	29.00	30.00	32.00
4x10 and 12	28.50	29.50	30.50	32.50
4x14	29.50	30.50	31.50	33.50

	24 Ft. and Under	25 to 32 Ft.	33 to 40 Ft.
6x10	$28.50	$30.50	$31.50
6x14	30.00	32.00	33.00
8x10	31.50	33.50	34.50
8x14	33.00	35.00	36.00

New York, Chicago and St. Louis	Southern Pine —New York*— 20-24 Ft.	—Chicago— 20 Ft. 34 Ft. and Under	22-24 Ft.	Yellow Pine —St. Louis— 20 Ft. and Under	22-24 Ft.
3x 4 to 8x 8	$39.00	$40.00	$38.50	$39.50	$35.00	$37.00
3x10 to 10x10	43.00	44.00	40.50	41.50	38.50	40.00
3x12 to 12x12	45.00	46.00	43.50	44.50	40.00	41.50
3x14 to 14x14	50.00	51.00	47.50	48.50	45.00	47.00
3x16 to 16x16	54.00	55.00	51.00	52.00	48.00	50.00
3x18 to 18x18	59.00	60.00	55.00	56.00	52.00	53.50
4x20 to 20x20	62.00	63.00	61.00	62.00	....	....

* From Lumbermen's Bureau.

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Other Cities

	8 x 8-In. x 20-Ft. and Under P.	Fir	Hemlock	Spruce	12 x 12-In. 20 Ft. and Under P.	Fir
Boston	$46.50	$45.00	$45.00	$46.00	$52.00	$46.00
Cincinnati	37.00	....	36.00	....	41.00	....
Kansas City	40.50	41.50	41.50	39.50	45.50	43.50
Seattle	17.50	17.50	17.50	17.50	17.50	17.50
New Orleans	31.50	....	....	....	36.50	....
St. Paul	46.00	50.00	46.00	46.00	....	53.00
Denver	44.00	34.50	34.50	....	49.00	39.00
Atlanta	35.50	....	....	....	43.00	....

	1-In. Rough, 10 In. x 16 Ft. and Under P.	Fir	Hemlock	2-In. T. and Gr. 10 In. x 16 Ft. P.	Fir
Boston	$50.00	$45.00	$40.00	$45.00	$48.50
St. Paul	50.50	40.00	40.00	48.50	44.50
Kansas City	50.00	55.75	55.75	53.50	61.00
Seattle	17.50	17.50	17.50	17.50	17.50
New Orleans	34.00	....	....	31.50	....
Cincinnati	43.00	39.00	39.00	42.00	38.00
Denver	45.00	33.50	33.50	38.00	30.00
Atlanta	32.50	....	....	32.50	....
Los Angeles	....	29.00	28.00	....	....

Dallas—Yellow Pine:

2x4 to 2x12—12, 14 and 16	$38.80
2x4 to 2x12—10, 18 and 20	40.90
2x4 to 2x12—22 and 24	43.20
4x4, 4x6, 6x6, 8x8 and 3x8	46.25
8x10, 10x10 and 3x10	52.00
12x12 and 3x12	54.25

NAILS—The following quotations are per keg from warehouse:

	Mill Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	$3.25	$4.00	$4.37	$5.00	$4.75
Cut	3.45	6.50	6.50	5.75	....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	$0.30	New Orleans	$0.38½
Buffalo	.17	New York	.27
Chicago	.27	Pacific Coast (all rail)	1.25*
Cincinnati	.23	Philadelphia	.24½
Cleveland	.17	St. Louis	.24
Denver	.99	St. Paul	.49½
Kansas City	.59		

Note—Add 3% transportation tax. * Minimum carload, 80,000 lb.

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. bbl.	$.003	None
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.02	0.05
Soda ash, in 400-lb. bbl.	.03	.03
Liquid chlorine in 100-lb. cylinders Lime is quoted separately	.10– 12	12

Contractors' Miscellaneous Supplies

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Current	One Month Ago	One Year Ago
$2.55	$3.50	$3.10

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York and St. Louis
Galvanized iron rigging	17½%
Galvanized cast steel rigging	2½%
Bright plow steel	30%
Bright cast steel	17½%
Bright iron and iron tiller	List

San Francisco: Galvanized, +5%; bright, 20% off.

MANILA ROPE—For rope smaller than ½-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅜-in., 8 ft.; ½-in., 6; ⅝-in., 4½; ¾-in., 3½; 1-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ½-in. and larger, in 1200-ft. coils:

Boston	$0.26	Atlanta	$0.3
New York	.29	Denver	.29
Cincinnati	.29	Kansas City	.28½
Chicago	.26½	New Orleans	.27½
St. Paul	.30	Seattle	.27
San Francisco	.26	Los Angeles	.34

EXPLOSIVES—Price per pound of dynamite in small lots and price per 25 lb. keg for black powder.

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	80%	Black Powder
New York		$0.27½	$0.30		$2.40
Boston	$0.22½	.24½	.26½	$0.31	2.40
Cincinnati	.19½	.21½	.23½	....	2.35
Kansas City	.20½	.25½	.30½	.38½	2.45
New Orleans	....	.24½	.28½	....	
Seattle	....	.18½	.21	....	
Chicago	.18½	.21½	.25½	.29½	2.35
St. Paul	.19	.25½	.30½	....	2.45
St. Louis	.19	.23½	.25½	.30	2.35
Denver	.17½	.24	.29	.35	2.60
Dallas	.21	.27½	.32	.38	....
Los Angeles	.23	.30	.37	....	2.95

POLES—Price of Western red cedar poles is as follows:

	—New York— Current	One Year Ago	Chicago	St. Louis	Denver
6-in. x 30-ft.	$5.82	$5.66	$5.17	$4.55	$5.17
7-in. x 30-ft.	7.65	7.45	6.85	6.00	6.85
7-in. x 35-ft.	11.10	10.80	10.00	8.95	10.00
8-in. x 30-ft.	12.65	12.30	11.35	10.10	11.35
7-in. x 40-ft.	12.85	12.50	11.50	10.20	11.50
8-in. x 45-ft.	18.90	18.40	16.90	15.00	16.90
8-in. x 50-ft.	22.65	22.05	20.30	18.00	20.30

10c. higher freight rates on account of double loads.

For plain pine poles, delivered New York, the price is as follows:

10-in. butts, 5-in. tops, length 20-30 ft.	$9.00
12-in. butts, 6-in. tops, length 30-40 ft.	11.50
12-in. butts, 6-in. tops, length 41-50 ft.	12.50
14-in. butts, 6-in. tops, length 51-60 ft.	21.00
14-in. butts, 6-in. tops, length 61-71 ft.	23.50

	Dallas
6-in. x 20-ft.	$3.00
6-in. x 30-ft.	5.00
8-in. x 30-ft.	7.50
8-in. x 35-ft.	7.50

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York	Chicago	St. Louis
No. 1 railroad wrought	$18.50	$15.00	$15.50
Stove plate	16.00	15.00	15.50
No. 1 machinery cast	22.50	20.00	19.50
Machine shop turnings	8.50	6.00	7.00
Cast borings	10.00	7.00	7.50
Railroad malleable cast	13.50	15.50	14.00

SHIP SPIKES—Current prices per 100 lb.

In.	San Francisco Galv.	San Francisco Black	Seattle Black
⅜	$10.50	$8.50	$8.35
½	9.85	7.85	8.25
⅝	9.70	7.70	8.30

Pittsburgh base, $4.75 per 100 lb.

PROPOSALS

"For Proposals Advertised see the pages immediately following the Construction News Section."

WATER-WORKS

Bids Close		See Eng. News-Record
Apr. 7	Pauls Valley, Okla.	Apr. 3
Apr. 8	High Point, N. C.	Apr. 3
Apr. 9	Kansas City, Mo.	Mar. 27
	Adv. Mar. 20 to April 3.	
Apr. 9	Atlanta, Ga.	Apr. 3
Apr. 9	Wards Island, N. Y.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 10	Brighton, Mass.	Apr. 3
Apr. 10	Nashville, Ark.	Apr. 3
Apr. 11	Jacksonville, Ill.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 11	Spencer, Pa.	Apr. 3
Apr. 14	Salem, N. J.	Apr. 3
Apr. 15	Duluth, Minn.	Mar. 13
Apr. 15	Freeport, O.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 18	Akron, O.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 23	Kansas City, Mo.	Apr. 3
	Adv. Apr. 3.	
Apr. 25	Akron, O.	Apr. 3
	Adv. Apr. 3.	

SEWERS

Apr. 7	Providence, R. I.	Apr. 3
Apr. 8	Hagerstown, Md.	Mar. 20
	Adv. Mar. 20 to Apr. 3.	
Apr. 9	Maplewood, Mo.	Apr. 3
Apr. 15	Roanoke, Va.	Apr. 3
Apr. 17	Pawtucket, R. I.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 22	Cleveland, O.	Mar. 27
May 1	Duluth, Minn.	Apr. 3
May 6	Newark, N. J.	Apr. 3

BRIDGES

Apr. 7	Rawlins, Va.	Mar. 20
Apr. 7	Stella, Va.	Mar. 20
Apr. 8	Lewisburg, W. Va.	Mar. 20
	Adv. Mar. 13 to Apr. 3.	
Apr. 8	Hillsboro, N. D.	Mar. 27
Apr. 8	College Hill, Pa.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 8	Eldora, Ia.	Apr. 3
Apr. 10	Clarksville, Pa.	Mar. 20
Apr. 10	New Haven, Conn.	Apr. 3
Apr. 11	Holyoke, Mass.	Mar. 13
	Adv. Mar. 13 and 20.	
Apr. 15	Copper Valley, Va.	Mar. 20
Apr. 15	Plainfield, N. J.	Apr. 3
Apr. 15	Rahway, N. J.	Apr. 3
Apr. 15	Elizabeth, N. J.	Apr. 3
Apr. 16	Ottawa, Ont.	Feb. 20
Apr. 19	Marshall, Ill.	Apr. 3
Apr. 22	Kingston, N. Y.	Mar. 20
	Adv. Mar. 20.	
Apr. 22	Toledo, O.	Mar. 27

STREETS AND ROADS

Apr. 4	New York	Mar. 20
Apr. 4	New Hampshire	Mar. 27
Apr. 7	Moulton, Ala.	Feb. 20
Apr. 7	Salem, N. J.	Mar. 13
	Adv. Mar. 20 to Apr. 3.	
Apr. 7	San Jose, Cal.	Mar. 20
Apr. 7	Waukesha, Wis.	Mar. 27
Apr. 7	Camden, N. J.	Mar. 27
Apr. 7	Albany, N. Y.	Mar. 27
Apr. 7	Dothan, Ala.	Mar. 27
Apr. 7	Breckenridge, Minn.	Mar. 27
Apr. 7	Wahpeton, N. D.	Mar. 27
Apr. 7	Colorado	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 7	Selma, Ala.	Apr. 3
Apr. 7	Atlanta, Ga.	Apr. 3
Apr. 7	Longueuil, Que.	Apr. 3
Apr. 7	Portland, Ore.	Apr. 3
Apr. 7	Irvington, N. J.	Apr. 3
Apr. 7	Sandborn, Ia.	Apr. 3
Apr. 8	Mt. Vernon, Wash.	Mar. 20
Apr. 8	Indiana	Mar. 20
Apr. 8	Davenport, Wash.	Mar. 27
Apr. 8	Harlowton, Mont.	Mar. 27
Apr. 8	Pittsburgh, Pa.	Mar. 27
Apr. 8	Hagerstown, Md.	Apr. 3
Apr. 8	New Iberia, La.	Apr. 3
Apr. 8	Winnsboro, La.	Apr. 3
Apr. 8	Aberdeen, Miss.	Apr. 3
Apr. 8	Maryland	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 8	Michigan	Apr. 3
Apr. 8	Logan, Ia.	Apr. 3
Apr. 8	Newark, N. J.	Apr. 8
Apr. 8	Henderson, Minn.	Apr. 3
Apr. 8	Waterville, Wash.	Apr. 3
Apr. 8	Stillwater, Minn.	Apr. 3
Apr. 8	Massachusetts	Apr. 3
Apr. 9	Hackensack, N. J.	Mar. 13
	Adv. Mar. 13 to 27.	
Apr. 9	New Jersey	Mar. 20
	Adv. Mar. 13 to Apr. 3.	
Apr. 9	Center, N. D.	Mar. 20
Apr. 9	Providence, R. I.	Mar. 27
	Adv. Mar. 20 and 27.	
Apr. 9	Ithaca, N. Y.	Mar. 27
Apr. 9	Baltimore, Md.	Apr. 3
Apr. 9	Wabasha, Minn.	Apr. 3
Apr. 9	Racine, Wis.	Apr. 3
Apr. 10	Indiana	Mar. 20
Apr. 10	Middlebourne, W. Va.	Mar. 20
Apr. 10	Nevada	Mar. 27
Apr. 10	Farmville, N. C.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 10	Cairo, Ga.	Apr. 3
Apr. 10	Walnut Ridge, Ark.	Apr. 3
Apr. 11	Jamestown, N. D.	Mar. 20
Apr. 11	Pennsylvania	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 11	Ebro, Minn.	Mar. 27
Apr. 11	Redwood Falls, Minn.	Apr. 3
Apr. 11	Dodgeville, Wis.	Apr. 3
Apr. 11	Beloit, Wis.	Apr. 3
Apr. 11	Toledo, Ohio	Apr. 3
Apr. 11	South Bend, Wash.	Apr. 3
Apr. 11	Springdale, Pa.	Apr. 3
Apr. 11	Michigan	Apr. 3
Apr. 12	La Moure, N. D.	Mar. 27
Apr. 12	Johnstown, Pa.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 12	Indiana	Apr. 3
Apr. 12	Sleepy Eye, Minn.	Apr. 3
Apr. 13	Columbus, O.	Apr. 3
Apr. 14	Johnson City, Tenn.	Mar. 20
Apr. 14	Tunica, Miss.	Mar. 20
Apr. 14	Minneapolis, Minn.	Mar. 27
Apr. 14	Lincoln, Neb.	Mar. 27
Apr. 14	Everett, Wash.	Apr. 3
Apr. 14	Savannah, Ga.	Apr. 3
Apr. 14	Washington, Pa.	Apr. 3
Apr. 15	Billings, Mont.	Mar. 20
Apr. 15	Greenville, Miss.	Mar. 13
	Adv. Mar. 20 to Apr. 3.	
Apr. 15	St. Louis, Mo.	Mar. 20
Apr. 15	Columbus, Neb.	Mar. 27
Apr. 15	Keyser, W. Va.	Mar. 27
Apr. 15	Pawtucket, R. I.	Mar. 27
	Adv. Mar. 27 and Apr. 3	
Apr. 15	Bronson, Fla.	Apr. 3
Apr. 15	Pittsburgh, Pa.	Apr. 3
Apr. 15	Keyser, W. Va.	Apr. 3
Apr. 15	Midland, Mich.	Apr. 3
Apr. 15	Fergus Falls, Minn.	Apr. 3
Apr. 16	Wayne, Neb.	Mar. 27
Apr. 16	Rhode Island	Apr. 3
	Adv. Apr. 3.	
Apr. 17	Arkansas	Apr. 3
Apr. 17	New York, N. Y.	Apr. 3
Apr. 18	Goldendale, Wash.	Apr. 3
Apr. 19	Gandy, Neb.	Mar. 27
Apr. 20	Terra Haute, Ind.	Apr. 3
Apr. 21	Indiana	Apr. 3
Apr. 21	New Iberia, La.	Apr. 3
Apr. 21	Tulsa, Okla.	Apr. 3
Apr. 21	Kent, Wash.	Apr. 3
Apr. 22	Spencer, W. Va.	Mar. 13
Apr. 23	Illinois	Apr. 3
Apr. 24	Illinois	Apr. 3
Apr. 24	New York, N. Y.	Apr. 3
	Adv. Apr. 3.	
Apr. 24	New Mexico	Apr. 3
Apr. 24	Auburn, Me.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 27	Pittsburgh, Pa.	Apr. 3
June 10	Clarksville, Pa.	Apr. 3

RAILWAYS

Apr. 8	Pennsylvania	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 9	Ontario	Apr. 3
Apr. 11	Ontario	Apr. 3
Apr. 15	British Columbia	Apr. 3

EXCAVATION AND DREDGING

Apr. 8	Hollandale, Miss.	Feb. 13
Apr. 8	Mason City, Ia.	Apr. 3
Apr. 9	Mason City, Ia.	Apr. 3
Apr. 9	Clarinda, Ia.	Apr. 3
Apr. 10	Crookstone, Minn.	Apr. 3
Apr. 11	Bridgeport, Conn.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 15	Trenton, N. J.	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 15	Ft. Dodge, Ia.	Apr. 3
Apr. 16	Spencer, Ia.	Apr. 3
Apr. 22	Crowley, La.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 29	New York, N. Y.	Apr. 3
	Adv. Apr. 3.	
May 6	Paragould, Ark.	Apr. 3
May 14	Poplar Bluff, Mo.	Apr. 3

INDUSTRIAL WORKS

Apr. 5	Richmond, Va.	Mar. 27
Apr. 7	Hartford, Conn.	Mar. 27
Apr. 7	Brooklyn, N. Y.	Mar. 27
Apr. 9	Guelph, Ont.	Mar. 27
Apr. 10	Vancouver, Va.	Apr. 3
Apr. 12	New York, N. Y.	Mar. 27
Apr. 14	Brooklyn, N. Y.	Apr. 3
Apr. 15	Long Island City, N. Y.	Mar. 27
Apr. 16	Winnipeg, Man.	Apr. 3
Apr. 16	Bellair, O.	Mar. 27
Apr. 18	Sheboygan, Wis.	Mar. 27
May 1	Brainerd, Minn.	Mar. 20
May 1	Joplin, Mo.	Mar. 27

BUILDINGS

Apr. 4	Brooklyn, N. Y.	Mar. 27
Apr. 7	Ordway, Colo.	Mar. 20
Apr. 7	Montreal, Que.	Apr. 3
Apr. 9	Jefferson, Ia.	Mar. 27
Apr. 10	Newaygo, Mich.	Feb. 6
Apr. 10	Grand Forks, N. D.	Apr. 3
Apr. 10	Huntington, Ind.	Apr. 3
Apr. 10	Rome, N. Y.	Mar. 27
Apr. 10	Scottsville, Ky.	Mar. 27
Apr. 11	Cobleskill, N. Y.	Apr. 3
Apr. 11	Brantford, Ont.	Apr. 3
Apr. 14	Superior, Wis.	Mar. 27
Apr. 15	Newark, N. J.	Feb. 6
Apr. 15	Chisholm, Minn.	Mar. 27
Apr. 15	Buhl, Minn.	Mar. 27
Apr. 21	Albany, N. Y.	Mar. 27
Apr. 22	Bovey, Minn.	Mar. 20
Apr. 22	Quincy, Cal.	Apr. 3
Apr. 25	Waterdown, Ont.	Apr. 3
May 1	Wakefield, Minn.	Mar. 20
May 1	Virginia, Minn.	Mar. 27
May 1	St. Louis, Mo.	Apr. 3

FEDERAL GOVERNMENT WORK

Apr. 4	Rip-Rap—Block Island, R. I.	Mar. 27
Apr. 5	Pass, Weir, etc. — Wheeling, W. Va.	Mar. 20
	Adv. Mar. 20 to Apr. 3.	
Apr. 7	Timber Wharf — Spec. 3801 —Chelsea, Mass.	Mar. 20
Apr. 7	Roads — Spec. 3796 — Chelsea, Mass.	Mar. 20
Apr. 7	Electrical equipment—Spec. 3785—Pensacola, Fla.	Mar. 27
Apr. 7	Electric Conduit and Switchboard—Spec. 3819—Wards Island, N. Y.	Apr. 3
Apr. 7	Steel — Spec. 3838 — Mare Island, Cal.	Apr. 3
Apr. 8	Dredging — New London, Conn.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 8	Remodeling Post Office, Providence, R. I.	Apr. 3
Apr. 9	Radial Brick Chimney—Wheeling, W. Va.	Mar. 27
Apr. 10	Wreck Removable—Buffalo, N. Y.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 11	Paving—Lorain, Ohio	Apr. 3
Apr. 12	Dredging—Sacramento, Cal.	Apr. 3
Apr. 12	Drilling Plant, etc.—Buffalo, N. Y.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 14	Cranes — Spec. 3477 — Boston, Mass.	Mar. 27
Apr. 14	Septic Tank, etc. — Spec. 3841—Chatham, Mass.	Apr. 3
Apr. 14	Building Addition — Spec. 3799—Portsmouth, N. H.	Apr. 3
Apr. 14	Gasoline Supply System—3734—Philadelphia, Pa.	Apr. 3
Apr. 15	Pumps, etc.—Omaha, Neb.	Mar. 6
	Adv. Feb. 27 and Mar. 6	
Apr. 15	Road Work—Washington, D. C.	Mar. 27
Apr. 16	Coal—Jacksonville, Fla.	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 16	Removing wreck—Buffalo, N. Y.	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 17	Valve Jacks — Wheeling, W. Va.	Mar. 27
	Adv. Mar. 20 to Apr. 3.	
Apr. 18	Post Office—Mt. Pleasant, Mich.	Mar. 13
Apr. 21	Post Office — Rhinelander, Wis.	Mar. 13
Apr. 21	Post Office and Court House —Erie, Pa.	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 21	Sewage Disposal System—Washington, D. C.	Apr. 3
Apr. 23	Post Office—Gilmer, Tex.	Mar. 13
Apr. 23	Earth Work—St. Louis, Mo.	Mar. 27
	Adv. Mar. 27 and Apr. 3.	
Apr. 23	Soil and Sod—Galveston, Texas	Apr. 3
	Adv. Mar. 27 and Apr. 3.	
Apr. 24	Dredging — San Francisco, Cal.	Apr. 3

Bids Close		See Eng. News-Record
Apr. 25	Towboat—Memphis, Tenn. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 28	Dredging—New York, N. Y.	Apr. 3
Apr. 28	Officers Quarters — West Point, N. Y. Adv. Apr. 3.	Apr. 3
Apr. 29	Dredging — New York, N. Y. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 30	Levee Work—St. Louis, Mo. Adv. Apr. 3.	Apr. 3
May 1	Wharf—Boston, Mass.	Apr. 3
May 3	Dredging — Jacksonville, Fla. Adv. Apr. 3.	Apr. 3

MISCELLANEOUS

Apr. 3	Sand, etc. — Long Island City, N. Y.	Mar. 27
Apr. 3	Grits, etc. — New York, N. Y.	Mar. 27
Apr. 4	Paving blocks—New York, N. Y.	Mar. 27
Apr. 8	Road Materials—Columbus, O. Adv. Mar. 20 to Apr. 3.	Mar. 20
Apr. 8	Asphalt, Tar Oil, etc.—Wilmington, Del.	Apr. 3
Apr. 8	Mixer, etc.—Detroit, Mich.	Apr. 3
Apr. 8	Road Oil—Winnipeg, Man.	Apr. 3
Apr. 9	Sanitary Work — Willard, N. Y. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 9	Conduit, etc. — Baltimore, Md. Adv. Apr. 3.	Apr. 3
Apr. 10	Limes—Newport, Ark.	Mar. 13
Apr. 11	Culvert—Lockport, N. Y.	Apr. 3
Apr. 11	Paving Material — Maplewood, N. J.	Apr. 3
Apr. 11	Paving Material — Providence, R. I. Adv. Mar. 27 and Apr. 3.	Apr. 3
Apr. 11	Trestle—Trenton, N. J.	Apr. 3
Apr. 15	Pipes, Etc.—Detroit, Mich.	Apr. 3
Apr. 21	Levee—Port Allen, La.	Apr. 3
Apr. 29	Freight Shed—New York, N. Y. Adv. Apr. 3.	Apr. 3

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Mechanicsville—City having surveys made and plans prepared for new water supply system. J. R. Smith, comr. pub. wks.

N. Y., Newark—City voted $280,000 bonds to build gravity water supply system. Work includes pipe line involving 1750 tons c.i. pipe, 1,000,000 gal. rapid sand filtration plant, earth dam and dike, etc. J. P. Wells, Cutler Bldg., Rochester, consult. engr.

N. C., Fayetteville—City plans to issue $40,000 bonds to extend waterworks system. H. J. McBuie, city clk.

S. C., Pickens—City election Apr. 21, to vote on $40,000 bonds to build waterworks and sewerage systems.

Ga., Brunswick—City election soon to vote on $200,000 bonds to build water plant. J. H. Hoplein, mayor.

Ga., Swainsboro—See "Sewers."

Miss., Gloster—City voted $11,000 bonds to install oil burning engines and other machinery in water and electric light plants. Address the mayor.

La., Baton Rouge—City plans to install 5,000,000 gal. capacity pump at water plant; also build concrete foundation for same. About $30,000. J. Mundengee, city engr.

O., Oxford—City receives bids about May or June building 200,000 gal. elevated tank and 1 mi. high tension transmission line; also installing new electric pumps. About $40,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Toledo—Lucas Co. receives bids about June laying water supply lines in Norwood addition. Work involves 24,100 ft. 6 in. and 960 ft. 8 in. c.i. pipes. About $49,000. L. A. Boulay, Court House engr.

Mich., Dearborn—City election Apr. 17, to vote on $87,000 bonds to improve waterworks system. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engr.

Ark., Springdale—City passed ordinance to build waterworks system. About $75,000. W. L. Winters, Ft. Smith, engr.

Tex., Alpine—See "Sewers."

Okla., Cardin—City voted $50,000 bonds to build waterworks system. Noted Mar. 13.

Idaho, Iona—City election Apr. 29 to vote on $20,000 bonds to build waterworks system.

Utah, Cedar City—City plans election soon to vote on $20,000 bonds to improve and enlarge waterworks system.

Utah, Paradise—City plans to build waterworks system. Bonds for $15,000 voted for project. T. H. Humphries, Logan, engr.

Cal., Monrovia—City having plans prepared by H. Gierlich, city engr., for 2,000,000 gal. rein.-con. rectangular shaped reservoir to replace existing Ivy Ave. reservoir.

B. C., Victoria—Dept. Pub. Wks., Ottawa, Ont., plans to install waterworks system to William Head quarantine station. About $80,000. R. C. Desrochers, secy.

BIDS DESIRED

N. Y., Wards Island—Until Apr. 9, by State Hospital Comn., Capitol, Albany, laying water main at Manhattan State Hospital here. E. S. Elwood, secy.; advertised in this issue.

N. J., Salem—Until Apr. 14, by W. A. W. Grier, mayor, furnishing materials and labor building 130 ft. standpipe, 25 ft. diameter, concrete foundation. N. S. Hires, supt. water dept.; advertised in this issue.

N. C., High Point—Until Apr. 8, by city, improving waterworks. Work involves building brick and concrete filter building, concrete coagulating basin, tower and tank, an auxiliary raw water pumping station, electric driven centrifugal pumps, incidental piping, etc. A. E. Taplin, High Point, engr.

Ga., Atlanta—Until Apr. 9, by city, building coagulating basin No. 5 at water works. W. E. Chamber, purch. agt.

O., Akron—Until Apr. 25, by H. S. Morse, dir. pub. serv., furnishing and laying 2.3 mi. 48 in. and 1 mi. 36 in. pipe line, etc. Bids will be received (a) furnishing 4400 tons 48 in. and 170 tons 36 in. c. i. pipe and 230 tons special castings; (b) laying pipe; (c) furnishing and laying 23 mi. steel pipe and 0.1 mi. 36 in. c.i. pipe. Noted Oct. 31; advertised in this issue.

Ill., Jacksonville—Until Apr. 11, by city, building filtration plant, 1,500,000 gal. capacity, 600 ft. earth dam, etc. R. Pyatt, city clk.; advertised in this issue.

Ia., Spencer—Until Apr. 11, by city, furnishing and laying 6400 ft. 4 in. Class D c. i. pipe, necessary valves, hydrants and other specials. W. L. Fahey, city engr. Former bids rejected. Noted Mar. 13.

Mo., Kansas City—Until Apr. 23, by J. R Samuel, purch. agt., designing and erecting rein.-con. stand pipe, 1,000,000 gal. capacity, at 75th and Homes Sts.; also one with 1,000,000 gal. capacity in North Terrace Park; advertised in this issue. Noted Jan. 30.

Ark., Nashville—Until Apr. 10, by T. H. Bourland, secy. waterworks dist. No. 1, laying 51,250 ft. 4-10 in. c.i. and 2 in. w.i. pipe, furnishing and placing 82 fire hydrants and 72 2-8 in. valves, also building 50,000 gal. tank and tower, 100 ft. high, pumping sta- 72—2-8 in. valves, also building 50,000 gal. per minute centrifugal pump, motor, compressor and 2 air lifts and drilling 2 wells. District to furnish c.i. pipe. W. L. Winters, Ft. Smith, engr.

Okla., Pauls Valley—Until Apr. 7, by city, extending waterworks and sewerage systems. About $25,000. W. E. Moore, 1006 Campbell Bldg., Oklahoma, engr. Noted Feb. 20.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract laying pipe line in Causeway St., to C. M. Callahan, 23 South Fairview St., $15,350. Work involves 665 ft. 8-20 in. c.i. pipe, 2050 cu.yd. earth excav., 20 cu.yd. rock excav. and 19 ft. 8-16 in. gates.

★Mass., Boston—Comr. Pub. Wks. let contract laying high pressure water pipe line in Atlantic Ave., involving 1935 ft. 8-20 in. c.i. pipe, 15 cu.yd. concrete, 2600 cu.yd. earth and 20 cu.yd. rock excav., etc., to V. Grande, 59 Hull St., $12,055; in Mozart St., Jamaica Plain, 6300 ft. 6 in. c.i. pipe and 300 cu.yd. excav., to J. Barletta, Genl. Delivery, $9605.

★Conn., Hartford—Comrs. Water Bd. let contract building slow sand filtration plant, to Foundation Co., 233 Bway., New York City. About $627,508. Noted Mar. 27.

★Conn., Wethersfield—Wolcott Hill Fire Dist. let contract building 4 mi. wood pipe water mains, to C. H. Slocumb, 25 Victoria Rd., Hartford, $14,000. Work involves 22,000 ft. 4-8 in. wood pipe.

N. J., Jersey City—City received bids furnishing and laying 39,590 ft. 72 in. riveted steel pipe line between Boonton Reservoir and west entrance of Watchung Tunnel, from Gaylord International Eng. & Constr. Co., Mears Bldg., Scranton, Pa., $1,098,076; P. McGovern & Co., 50 East 42nd St., New York City, $1,166,810; Liberty Constr. Co., $1,286,000. Noted Feb. 20.

★Okla., Tulsa—City let contract building intake tower, flow line and accessories, to J. T. Lantry, 303 Bank of Commerce Bldg., Tulsa, $15,800.

Sewers

PROPOSED WORK

Conn., New Haven—City soon lets contract building sewers and appurtenances in Butler St. from Huntington to Read Sts. and in Bassett St. from Butler St. to Shelton Ave. F. L. Ford, city engr.

S. C., Pickens—See "Waterworks."

Ga., Swainsboro—City election Apr. 8 to vote on $50,000 bonds to build sewerage and waterworks systems.

O., Maumee—State Bd. of Health has ordered city to have plans prepared for sewage disposal plant or trunk sewer to connect with Lucas Co. sewerage system, to eliminate discharge of sewage into Maumee River. G. Champe, 610 Nasby Bldg., Toledo, engr.

Mich., Dearborn—City election Apr. 17, to vote on $160,000 bonds to build trunk sewer from Monroe Ave. to Little Rouge River. C. W. Hubbell, 2348 Penobscot Bldg., Detroit, engr.

Mich., Detroit—Dept. Pub. Wks. soon lets contract trenching, backfilling and laying 2158 ft. 24 in. vitr. crock sewer arm in Livernois Ave. from Warren Ave. to Majestic Pl., 4786 ft. 5 ft. 6 in. cylindrical sewer in Alter Rd., brick, monolithic concrete, rein.-con., concrete segmental block or 2 ring vitr. segmental block, 8 manholes, etc. C. W. Hubbell, city engr.

Wis., Kenosha—City soon lets contract building sewers in Pickwick Pl. Selma, Fleet and North Chicago Sts., also Park and Norman Aves. Work involves 8175 ft. 12-24 in. vitr. pipe, 45 sewer stubs, 7 catch basins and 20 manholes. P. Hurtgen, city engr.

Wis., Racine—City soon lets contract building sewer in West Blvd. from Kinzie Ave. to Harvey Rd. Work involves 886 lin.ft. 12 in. and 434 lin.ft. 8 in. vitr. sewer, 5 manholes and 2 catch basins.

Ia., Corning—City having plans prepared by Archer & Stevens, engrs., 609 New England Bldg., Kansas City, Mo., for sewage disposal plant and 25,000 ft. 8, 10 and 12 in. sanitary sewers. W. C. Chubb, city clk.

Ia., Rockwell City—City plans to rebuild sanitary sewers in various streets. About $25,000 J. S. Buttner, city clk.

Ia., Williamsburg—City plans to build 5 mi. 6-18 in. sanitary sewer. C. Fletcher, city clk.

Minn., Keewatin—City voted $60,000 bonds to build sewerage system. F. A. McEachlin, clk.

Kan., Douglas—City soon lets contract building sanitary sewerage system. About $40,000. E. P. Pratt, clk. F. E. Devlin, consult. engr. Noted Mar. 27.

Neb., Nebraska City—City election Apr. 29, to vote on bonds to build South Side sewerage system, involving 2150 lin.ft. 24 in. and 7800 lin.ft. 30 in. pipe. About $52,487. E. Y. Grupe, of Grupe & Walter, 430 Bee Bldg., Omaha, constultg. engr.

Mont., Cut Bank—City election Apr. 15, to vote on $48,000 bonds to build sewerage system. H. P. Walters, Minot Bldg., Great Falls, engr.

Ark., Springdale—City passed ordinance to build sewerage system. About $50,000. W. L. Winters, Ft. Smith, engr.

Tex., Alpine—City having plans prepared by C. P. Bartlett, engr., Moore Bldg., San Antonio, for sewer and waterworks systems.

Okla., Pauls Valley—See "Waterworks."

Ore., North Bend—City having plans prepared by R. L. Cavanaugh, city engr., building sewers in Sherman Ave. and district west of Sherman Ave.

Sewers (Continued)

Ore., Portland—City considering building sewerage system to be known as South Branch of Rhine St. sewer. O. Laurgaard, city engr.

BIDS DESIRED

Mass., Brighton (Boston P. O.)—Until Apr. 10, by T. F. Sullivan, comr. pub. wks., building Faneuil Valley Brook Conduit in private land between Bd. Survey St., No. 1889 and Parson St. also pipe sewer and drains in Converse St.

R. I., Providence—Until Apr. 7, by Bd. Contr. & Supplies, building sewer in Hassan St., involving 618 ft. 12 in., 16 ft. 8 in. pipe, 350 ft. 6 in. drain; Overhill Rd., 215 ft. 12 in. and 30 ft. 8 in. pipe, 60 ft. 6 in. drains, 50 cu.yd. ledge excav.; Alexander, Robert and Rutherglen Sts., 420 cu.yd. concrete, 1482 ft. 16 in. brick and 1417 ft. 12 in., 284 ft. 6 and 8 in. and 100 ft. 8 in. pipe, 784 ft. 6 in. drains; Gallatin and Andrene Sts., 48 ft. 34 in. brick with 8 in. pipe, 12 ft. 16 in. brick with iron pipe, 775 ft. 16 in. brick, 40 ft. 12 in. brick, 424 ft. 12 in. pipe, 180 ft. 6 and 8 in. pipe, 720 ft. 6 in. drain, 800 ft. 8 in. under drains, 100 cu.yd. concrete and 50 cu.yd. excav. M. H. Bronsdin, city engr.

N. Y., Buffalo—Until Apr. 12, by A. W. Kreinheder, comr. pub. wks., building 6, 7 and 8 ft. storm water drain known as Sloans Drain. Work involves 11,000 ft. brick, segmental, tile block or rein.-con. pipe, etc. Noted Mar. 6; advertised in this issue.

N. J., Newark—Until May 6, by Passaic Valley Sewerage Comrs., 820 Essex Bldg., constructing Sect. 20, Rutherford-East Rutherford branch intercepting sewer in Rutherford, East Rutherford and Wallington boroughs. Work involves earth excav. and refilling in trench for 768 lin.ft. 24 in., 32,047 lin.ft. 27 in. and 1110 lin.ft. 36 in. circular concrete sewer; 1500 cu.yd. concrete masonry with Portland cement mortar in trench; 100 cu.yd. brick masonry in manholes, etc., laid with Portland cement mortar; 100 cu.yd. rock excav. in trench; excav. and refilling for special structures and for insertion of special structures in local sewer; furnishing and erecting tide gates in local sewer; Erie R. R. crossing, including furnishing and placing timbering, piling and other supports; 21,000 lb. steel for concrete reinforcement, etc. W. M. Brown, ch. engr.

Pa., College Hill (Easton P. O.)—Until Apr. 8, by J. Leeper, secy. of council, building 28,000 ft. sewer with necessary manholes, flush tanks, etc. Pipe to be furnished by boro. H. P. Dawson, Colonial Theatre Bldg., Beaver Falls, boro. engr.; advertised in this issue.

Pa., Springdale—See "Streets and Roads."

Md., Hagerstown—Until April 8, (change of date) by E. L. Heard, secy. sewerage comn., Police Headquarters Bldg., constructing intercepting storm and sanitary sewers in various streets and alleys. Noted Mar. 20.

Va., Roanoke—Until Apr. 15, by W. P. Hunter, city mgr., building sewer to drain property on Lynchburg and Madison Aves. and Jefferson St.

Minn., Duluth—Until May 1, by L. A. Ayres, city engr., laying sanitary sewers in 76th, 77th, 78th, 79th, 80th, 83rd and 84th Aves., involving 8364 ft. 8 in. pipe; outlet sewer on Grand Ave. from 74th to 84th Aves., W., 2746 ft. 10-22 in. pipe; outlet sewer direct from 74th Ave., W. on Grand Ave. to St. Louis River, 2688 ft. 6-27 in. c.i. pipe; overflow sewer on Grand Ave., 500 ft. 22 in. pipe; also building extensions to two water and gas mains systems. About $40,000.

Mo., Maplewood (St. Louis P. O.)—Until Apr. 9, by city, building sewers in Zephyr Hills, Sewer Dist. No. 1, involving 896 cu. yd. Class A., 2520 cu.yd. Class B and 24,292 cu.yd. Class C. excav., 526 cu.yd. common brick masonry, 20 cu.yd. vitr. brick masonry, 15,000 ft. 12—33 in. vitr. clay and 2300 ft. 42-66 in. segmental block pipes, 43,000 lb. c.i. and 7000 lb. w.i. pipe, etc. W. Stoecher, city engr.

Ark., Nashville—Until Apr. 10, by T. H. Bourland, secy. sewer dist. No. 1, excavating and building 51,500 ft. sewer, involving 144 ft. 8-12 in. c.i. and 51,500 ft. 8-12 in. vitr. pipe, 300 cu.yd. rock trenching, 98 manholes, etc.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Brooklyn—E. Riegelmann, boro. pres., received bids Mar. 26, (1) building sewer in 59th St. from 20th to 21st Aves., (2) Ave. M. from West St. to Ocean Pkway., from J. McCauley, 425 6th Ave., (1) $40,471; B. Peconi & Sons, (1) $43,916, (2) $5298; C. Petracca, Brooklyn, (1) $46,278; De Rienzo Co., 1010 60th St., (2) $5096; E. Galladi Contg. Co., (2) $6256. Noted Mar. 20.

★**Ala., Sheffield**—City let contract building storm sewers in various streets, to Long & Haggerty, Bessemer. About $90,000.

O., Youngstown—City received bids building (a) 3000 ft. 15 and 18 in. sewer in Parkview Ave., (b) 6600 ft. 15-24 in. sewers in Sugar Creek Sewer Dist., from F. George Co., 1657 Mahoning Ave., (a) $13,218, (b) $52,260; S. H. De Groodt, 611 Erie St., (a) $12,478, (b) $59,725; A. O'Horo, 237 Scott St., (a) $13,218; E. Diorio, 220 Court St., (b) $58,074. Noted Mar. 20.

★**Mich., Detroit**—Dept. Pub. Wks. let contracts building following vitr. pipe crock lateral sewers: (a) No. 3049, involving 1788 ft. 12-24 in., etc.; (b) No. 3099, 1810 ft. 12-15 in.; (c) No. 3100, 1017 ft. 12-15 in.; (d) No. 3103, 823 ft. 12 in.; (e) No. 3106, 1966 ft. 12-18 in.; (f) No. 3105, 3084 ft. 12-24 in.; (g) No. 3110, 3403 ft. 12-20 in.; (h) No. 3111, 1263 ft. 12-18 in., (i) No. 3112, 760 ft. 12 in.; to W. G. A. Adams, Windsor, Ont., (a) $5500; (h) $4300. J. M. Alfeld, 1208 Ford Bldg., (b) $4171. Liberty Constr. Co., Penobscot Bldg., (c) $1956; (d) $2228. Lennane & McIlvenna, Union Trust Bldg., (e) $7200; (g) $9900; (i) $1666. Brandon & Hanna, 1624 Dime Bank Bldg., (f) $4270. Noted Mar. 13.

Mich., Port Huron—Dept. Pub. Wks. received bids building sewers in (a) Farrand St. from 20th to 24th Sts., involving 2288 ft. 6-20 in. vitr. crock pipes, 7 manholes, 8 catch basins; (b) Martin Ave. from 20th to 17th Sts., 1582 ft. 8-18 in. crock pipes, 6 manholes, 8 catch basins, from B. R. Burge, (a) $6155; (b) $4394; J. Deloyea, (a) $6921; Collins & Campbell, (a) $6172, (b) $4348; J. Kaumeier, (b) $4750. All bidders of Port Huron.

★**Mo., Kansas City**—Bd. Pub. Wks. let contract building combined storm and sanitary concrete sewer in district bounded by 40th, 43rd, Indiana and Agnes Sts., to T. McCarthy Constr. Co., $36,000. Work involves 42 catchbasins, 38 manholes, 1 drop manhole, 1 double drop manhole and one triple drop manhole, 9370 ft. 10-36 in. pipe.

Bridges

PROPOSED WORK

N. J., Elizabeth—Bd. Freeholders Union Co. receives bids about Apr. 15, building 50 ft. bridge over Robinson Branch of Rahway River, in Clark Twp., 40 ft. wide. About $15,000. J. L. Bauer, 120 Broad St., engr.

N. J., Plainfield—Bd. Freeholders Union Co. (Elizabeth) receives bids about Apr. 15, building 50 ft. bridge over Green Brook on Rock Ave., 40 ft. wide, cost, $14,000; 50 ft. bridge over Green Brook, on Sanford Ave., 50 ft. wide, $14,000. J. L. Bauer, 120 Broad St., Elizabeth, engr.

N. J., Rahway—Bd. Freeholders Union Co., Elizabeth, receives bids about Apr. 15, building 100 ft. bridge over Rahway River on Monroe St., 60 ft. wide. About $40,000. J. L. Bauer, 120 Broad St., Elizabeth, engr.

N. C., Fayetteville—City plans to issue $10,000 bonds to build concrete bridges. H. J. McBuie, city clk.

S. C., Lockhart—State Highway Comn., Columbia, soon lets contract building steel truss bridge with steel trestle approaches, over Broad River linking Chester and Union Counties. R. T. Brown, engr.

Minn., Duluth—St. Louis Co., 5th Dist., plans to expend $50,000 to build Fond-du-lac bridge and $5000 for approaches. R. W. Acton, Courthouse, engr.

Minn., Minneapolis—See "Streets and Roads."

Mont., Bigtimber — See "Streets and Roads."

Mont., Ekalaka — See "Streets and Roads."

Tex., Ballinger—Comrs. Runnels Co. soon receive bids building concrete bridge or viaduct over Colorado River. About $50,000. State Highway Comn. has appropriated $37,000 toward cost. Hess & Skinner, South Western Life Bldg., Dallas, engrs. Noted Mar. 20.

Tex., Galveston—Comrs. Galveston Co. soon let contract building one 30 ft. and two 20 ft. rein.-con. bridges on Galveston-Houston, Rd., near La Marque.

Idaho, Blackfoot — See "Streets and Roads."

Ariz., Cornville—State Legislature Capitol, Phoenix, appropriated $20,000 to build bridge over Oak Creek near here.

Wash., Chehalis—See "Streets & Roads."

Ont., Toronto—See "Streets and Roads."

BIDS DESIRED

Conn., New Haven—Until Apr. 19, by city, building rein.-con. arch bridge, 70 ft. wide, over Mill River on Organ St., to have two 32 ft. spans and one 36 ft. span. About $70,000. F. L. Ford, city engr. Noted Feb. 13.

N. J., Trenton—Until Apr. 11, by City Comrs. building steel trestle and siding on Enterprise Ave. About $20,000. J. R. Fell, ch. engr.

Ill., Marshall—Until Apr. 19, by Clark Co., building Cumrin Bridge, 40 ft. rein.-con. span, 16 ft. roadway, involving 99 cu.yd. concrete, 13,995 lb. reinforcing steel, 481 lb. c.i. rockers and steel plates, etc., cost $3000; Carpenter Bridge, 70 ft. span, $2800; Cornwell Bridge, 22 ft. span, $725; Wells Bridge, 34 ft. span, each 16 ft. roadway, $1000; Crow Bridge, 100 ft span, involving 41 cu.yd. concrete, 1950 lb. reinforcing steel etc., $6320; all in Melrose Twp. G. F. Birch, Springfield, asst. engr.

Ia., Eldora—Until Apr. 8, by C. Boyian, aud. Hardin Co., building bridges and culverts in various townships. R. Steigerwalt, co. bridge engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. J., Gloucester**—City let contract building concrete bridges over Little and Big Birch Creeks, Edwards and Bathel Runs, to E. P. Henry & Son, 98 Green St., Woodbury, $33,561.

N. J., Trenton—City received bids building 64 ft. concrete and steel bridge over Assanpink Creek on Olden Ave., 14 ft. wide, from Celuitlano & Pinto, Trenton, $10,340; H. H. Smith, 949 Bway., New York City, $11,190; Reese Taylor Co., Mechanic Bldg., $11,950.

Ill., Chicago—C. R. Francis, comr. pub. wks. received bids Mar. 21, for superstructure of 3 span cantilever fixed bridge, over north branch Chicago River on Addison St., from Milwaukee Bridge Co., 1400-34th St., Milwaukee, Wis., $41,889; Morava Constr. Co., 122 South Michigan Ave., $43,775; Ketler-Elliott Erection Co., 155 North Clark St., $45,000; substructure, from Paschen Bros., 111 West Washington St., $109,266; Fitzsimons Connel Dredge & Dock Co., 10 South La Salle St., $113,927; Concrete Dock Constr. Co., 133 West Washington St., $124,487. Noted Mar. 13.

Ill., Chicago—C. R. Francis, comr. pub. wks., received bids Mar. 20, for substructure and superstructure of 80 ft. fixed steel bridge on concrete abutments over north branch Chicago River on Kimball Ave., from Overland Constr. Co., 39 South La Salle St., $57,371; Hoeffer & Co., 133 West Washington St., $57,872; Paschen Bros., 111 West Washington St., $59,318; also 70 ft. creosoted pile and timber trestle bridge on Lawndale Ave., from G. P. Cullen, 140 South Dearborn St., $30,872; Kelly-Atkinson Constr. Co., 189 West Madison St., $32,488; Overland Constr. Co., 39 South La Salle St., $35,199. Noted Mar. 13.

★**Wis., Beloit**—City let contract building rein.-con. bridge, over Rock River, to Klug & Smith, West Allis St., $67,000. Noted Jan. 16.

★**Ia., Ft. Dodge**—Webster Co. let contract building 9 bridges in various townships, to C. Johnson, Humboldt, $14,938; 9, to A. Olson Constr. Co., Waterloo, $11,036; 3, to W. T. Baxter, Webster City, $2905.

★**Ia., Waterloo**—City let contract building rein.-con bridge over Cedar River on Souci-Whitney Rd., to Fifield Constr. Co., $73,885.

★**Minn., St. Cloud**—See "Streets and Roads."

★**Cal., Visalia**—Bd. Supervs. Tulare Co. let contract building 2 concrete bridges between here and Dinuba, to S. J. Smartt, Bakersfield, $10.85 per cu.yd.; also building 4 concrete bridges, 3 concrete culverts and 7 wings for culverts on Woodville-Tipton highway, to Concrete Pipe & Constr. Co., Porterville, $10 per cu.yd. for class A concrete, $9.75 per cu.yd. for class B concrete. Noted Mar. 6.

Structural Steel

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Washington**—See "Streets and Roads."

Reinforced Concrete

PROPOSED WORK

Va., Norfolk—See "Industrial Works."

Mich., Detroit—See "Industrial Works."

Wis., Milwaukee—See "Streets and Roads."

Tex., Galveston—See "Bridges."

BIDS DESIRED

Ont., North Bay—See "Railways, under Ontario."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Conn., Deep River**—See "Industrial Works."

★**Conn., New Haven**—See "Miscellaneous."

★**N. J., Gloucester**—See "Bridges."

N. J., Trenton—See "Bridges."

★**Ia., Waterloo**—See "Bridges."

★**Ark., Little Rock**—See "Industrial Works."

Streets and Roads

PROPOSED WORK

N. Y., Buffalo—Erie Co. soon receives bids building 4½ mi. Collins Center-Zoar Rd., Collins Twp., waterbound macadam and 1.8 mi. Langford-New Oregon Rd., East Collins Twp., waterbound macadam. Noted Feb. 6.

N. Y., Rochester—Bd. Contr. & Supply soon lets contract paving with asphalt on Norton St., $130,000, Melville St., $26,000; resurfacing Driving Park Ave. from Lake to Dewey Aves., $17,660, Smith St., $32,000, etc. A. C. Poole, city engr. Noted Mar. 6.

N. Y., Utica—Bd. Contr. & Supply soon lets contract for asphalt paving on Hart St. from Mandeville to Kirkland Sts., and from Plant to Tracy Sts., Gilbert St. from Bleecker St. to Erie Canal, Ontario St. from Bleecker to Catherine Sts.; resurfacing Main St. from John to 1st Sts. and John St. from Baggs Sq. to Erie Canal. A. E. Roche, city engr.

N. J., Bayonne—City plans to pave West 40th St. from Ave. B to Ave. C, asphalt; also Oak St., granite block, blue stone curb and concrete sidewalk. W. H. Clarkson, city engr.

N. J., Camden—Fairview Realty Co., Administration Bldg., Yorkship Village, Camden, soon lets contract for 6 mi. macadam, 2 mi. concrete and 4 mi. cement alley paving, curbs, gutters, sidewalks, etc., for settlement of 1600 houses, Yorkship Village. Work involves 20,000 sq.yd. concrete, 60,000 sq.yd. waterbound macadam and 40,000 lin.-ft. cement curbing.

N. J., Jersey City—City plans to pave Hutton St. from Hudson Co. Blvd. to Liberty Ave. with bituminous concrete; Liberty Ave. between St. Paul's Ave. and Hopkins Ave., asphalt. About $50,000. C. A. Van Keuren, city engr.

N. J., North Bergen—Town plans to improve Bway. from Guttenberg Line to 35th St., cost $10,000; also Bergenline Ave. from Guttenberg Line to end of township.

N. J., North Bergen—Town having plans prepared grading and improving 35th St. from Hudson Blvd. to Hackensack Plank Rd., granite block. About $20,000. P. F. Daly, town engr.

N. J., Tyler—Smith Co. election Apr. 12, to vote on $1,250,000 bonds to build roads.

Pennsylvania—State Highway Comn., Harrisburg, rejected bids building 1842 ft. brick road in Clarion Boro. Noted Mar. 27.

Pa., New Brighton—City rejected bids paving 13th St., between 6th and Penn Aves. New bids will be received in about 30 days. H. T. Barker, city engr. Noted Mar. 13.

Pa., New Kensington—Boro. soon lets contract grading, paving and curbing Catalpa St., from Stanton to Ridge Aves., involving 4000 yd. earth excav., 1720 lin.ft. plain concrete curb and gutter, 640 lin.ft. concrete steel protected curb and gutter, 6500 sq.yd. paving, 1200 lin.ft. concrete cross drains, 520 ft. stone backing curb; Ridge Ave., from end of present pavement to Catalpa St., 410 yd. earth grading, 71 lin.ft. plain concrete curb and gutter, 50 lin.ft. concrete steel protected curb and gutter, 1820 sq.yd. paving, 360 lin.ft. concrete cross drains; North St., from Taylor to Freeport Aves., 2400 cu.yd. earth excav., 1700 lin.ft. plain concrete curb and gutter, 580 lin.ft. steel protected curb and gutter, 720 lin.ft. concrete cross drains, 350 ft. stone backing curb, 3900 sq.yd. paving; North St., from Stanton to Taylor Aves., 880 lin.ft. plain concrete curb and gutter, 390 lin.ft. steel protected curb and gutter; 9th St., from 6th to Pine Sts., resurfacing 4650 sq.yd. with asphaltic concrete. Bids will be received for both brick and rein.-con. paving on 5 in. concrete base. Douglass & McKnight, 1315 Union Bank Bldg., Pittsburgh, boro. engrs.

Pa., Northampton—Town soon lets contract for (1) laying cement sidewalks, curbs and gutters in front of private properties, (2) laying concrete street crossings, (3) laying crushed slag or stone concrete subbase for bituminous or amiesite street paving, (4) laying 1 course cement concrete street paving on East 14th, East 17th and 8th Sts. between Main St. and alley east of Lincoln Ave., (5) excavation and filling required for street grading, (6) furnishing crushed trap rock f.o.b. cars at Northampton and Siegfried, (7) furnishing and carting crushed local stone, (8) unloading and carting upon Laubach Ave. between Main St. and Newport Ave., the amiesite or other bituminous paving material shipped here in railroad cars, (9) laying amiesite or other bituminous paving material on Laubach Ave. J. G. Koch, 1703 Main St., secy.

Pa., Sheridan (Pittsburgh P. O.)—City of Pittsburgh and Pittsburgh Rys. Co., 435 6th Ave., Pittsburgh, plan to improve 3000 ft. Chartiers Ave. from Danley to Stroka Sts., 34 ft., wide. Total cost, $103,000. Railway will appropriate $80,000 toward cost and balance of $23,000 will be paid by city. T. Reed, City County Bldg., engr. F. Uhlenhart, ch. engr. ry.

Va., Norfolk—City voted $750,000 bonds to pave Boush, Plume, Tazewell, Dunmore, 24th and 17th Sts. and Fairfax, Pembroke and Cooley Aves. W. H. Taylor, Jr., city engr.

W. Va., Berkeley Springs—Comrs. Morgan Co. plan to grade and macadamize 5 mi. South Washington St., Martinsburg and Hancock Rds. About $50,000. E. L. Miller, co. engr.

W. Va., Winfield—Comrs. Putnam Co. having surveys made for hard surfacing 9½ mi. road in Curry Dist., 9 ft. wide, with 4½ ft. stone berm on either side. J. S. Parkins, Paradise, engr.

N. C., Danbury—Stokes Co. voted $25,000 bonds to build roads in Beaver Island Twp. R. G. Petree, co. clk.

N. C., Fayetteville—City plans to issue $25,000 bonds to repave various streets. H. J. McBuie, city clk.

N. C., Raleigh—Wake Co. soon lets contract paving 4½ mi. Garner-Raleigh Rd., 16 ft. wide, involving 39,822 sq.yd. concrete, warrenite, brick or asphalt. C. M. Miller, co. engr. Noted Mar. 14, 1918.

N. C., Washington—Beaufort Co. plans election soon to vote on $1,000,000 bonds to build roads.

S. C., Union—Union Co. voted $1,175,000 bonds to improve highways.

Fla., Bradentown—Manatee Co. plans to issue $115,000 bonds to build roads.

Fla., Jacksonville—City having estimates made for improving streets and sidewalks. About $10,000. F. M. Edwards, city engr.

Fla., Jacksonville—Duval Co. Comn. soon lets contract paving 6500 sq.yd. Atlantic Blvd. from Kings Rd. to Hendrix Ave. L. L. Meggs, chn.

O., Bradford—City receives bids about June building 7000 ft. Miami and Main Sts., involving 20,000 sq.yd. vitr. brick, concrete or asphalt pavement on 6-in. concrete base and 15,000 lin.ft. stone or concrete curbing. About $110,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Centerburg—City receives bids about May grading, draining, curbing and paving 2700 ft. Hartford St., 26-42 ft. wide, involving 9000 sq.yd. vitr. brick or asphalt block, 5600 lin.ft. concrete curbing and 3000 cu.yd. earth excav. About $40,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., East Liverpool—City passed resolution to pave Bway., St. Clair Ave., Leak Hollow Rd., West 8th and Market Sts. About $150,000. J. N. George, East Liverpool, engr.

O., Green Springs—City had surveys made for grading and paving 2500 ft. Main St. 30 ft. wide, involving 9000 sq.yd. vitr. brick on stone foundation. About $30,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Maumee—City plans to grade, curb and pave Conant St. from canal to Wabash R.R. About $10,375. G. Champe, $10 Nasby Bldg., Toledo, engr.

O., Oxford—City receives bids about June paving 2000 ft. High St., 30 ft. wide, involving 7000 sq.yd. vitr. brick and 4400 lin.ft. concrete curbing. About $35,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., South Charleston—City receives bids in summer building 3000 ft. Main St., 30-42 ft. wide, involving 14,000 sq.yd. vitr. brick or wood block on 6-in. concrete base and 6400 lin.ft stone or concrete curbing. About $75,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Sycamore—City receives bids about May paving 3000 ft. Main and Prospect Sts., 30-40 ft. wide, involving 10,000 sq.yd. vitr. brick or asphalt blocks and 6500 lin.ft. concrete curbing. About $40,000. L. A. Boulay Co., 1250 Nicholas Bldg., Toledo, engrs.

O., Toledo—City receives bids in spring repaving Cherry St. Bridge over Maumee River 1150 ft. long, 54 ft. wide. H. C. McClure, 209 Valentine Bldg., engr.

O., Toledo—City having plans prepared by H. C. McClure, engr., 229 Valentine Bldg., paving Glen St. from Western Ave. to south end of street, 24 ft. wide, also ½ mi. Hawthorne St. from Dorr to Oakland Aves.

O., Toledo—Comrs. Lucas Co. receive bids about June, grading, curbing, and paving with asphalt on 6 in. concrete base, Clarendon Dr., Oakwood and Grand Aves., Foster and West Woodruff Sts., 6200 ft. long, 24 ft. wide. Work involves 13,000 lin.ft. concrete curbing and guttering. About $70,000. C. L. Rood, co. engr.

Ind., Terre Haute—Comrs. Vigo Co. receive bids about Apr. 15, grading and paving 2½ mi. John L. Smith Rd., 18 ft. wide, and 2 mi. John L. Crawford Rd., 18 ft. wide, brick, concrete, asphaltic concrete or vibrolithic on concrete base. About $102,500 and $83,600 respectively. R. E. Gibbons, co. engr.

Michigan—State Highway Comn., Lansing, soon lets contract shaping, draining and surfacing 6.916 mi. Rd. No. 62, Ionia Co., Class B. gravel, 12 ft. wide. Work also includes 235 ft. cement concrete pavement 51 ft. wide and 645 ft. cement concrete 55 ft. wide. F. F. Rogers, state highway comr.

Mich., Battle Creek—City plans election to vote on $200,000 bonds to pave various streets, also build sewers and bridges.

Mich., Detroit—Dept. Pub. Wks. soon receives bids paving with asphaltic concrete on 6 in. concrete base, Berea or Medina curbing or other curbstone, Springvale Ave. from Ferndale to Dix Aves., 26 ft. wide, cost $29,854; Caleran Ave. from Junction to Cavalry Aves., 26 ft. wide, $15,416; Senator Ave. from Beard St. to Lawndale Ave., 26 ft. wide, $56,718; Honorah Ave. from Ferndale to Dix Aves., 26 ft. wide, $21,344; Leslie Ave. from Oakman to Wabash Aves., 24 ft. wide, $32,916; also north and south alley in block bounded by Field, Sheridan, Forest and Gratiot Aves., 1 course concrete, 20 ft. wide, $5,100. C. W. Hubbell, city engr.

Mich., Highland Park (Detroit P. O.)—City having plans and estimates made grading and paving 1000 ft. Avalon Ave. from Hamilton Blvd. west, asphaltic concrete or concrete, 24 ft. wide. About $11,000. L. C. Whitsit, 20 Gerald Ave., engr.

Mich., Port Huron—City having plans and estimates made paving Griswold St. east to railroad track crossing east of 4th St., concrete or brick. About $11,000. E. R. Whitmore, city engr.

Mich., Port Huron—Dept. Streets had plans prepared paving Stone St. from State to Garfield Sts., concrete, $22,000, brick, $31,000; Crescent Pl. from Water to 10th Sts., concrete $5500, brick, $7500; alley in block 58 from Pine St. east and north to 4th St., concrete, $1900, brick, $2100. E. R. Whitmore, city engr.

Wisconsin—State Highway Comn., Madison, plans to expend $27,000 to build Federal Highway between Radisson and Couderay. Sawyer Co. will bear ½ of cost.

Wis., Milwaukee—Comrs. Milwaukee Co. soon let contract grading and paving Packard Ave. from Plankinton Ave. 1½ mi. north to Lake Rd., involving 13,000 sq.yd. 1 course concrete paving, 6000 cu.yd. excav., 60 cu.yd. concrete culverts and 12 ft. concrete bridge; St. Martins Rd. No. 3 from Loomis to Ryan Rd., Ryan Rd. No. 4 from St. Martins to Center Rd., and 4½ mi. Center Rd. No. 3 from Ryan Rd. to county line, 42,500 sq.yd. 1 and 2 course concrete paving, 20,500 cu.yd. excav., 380 cu.yd. concrete culverts and 20 ft. concrete bridge; grading and paving 1½ mi. Burleigh St. No. 2 from 43rd St. west to Lisbon Rd., bituminous or 1 course concrete on concrete foundation, 24,000 sq.yd. paving, 9000 cu.yd. excav. and 90 cu.yd. concrete in culverts. G. Hampel, co. clk.

Streets and Roads (Continued)

Ia., Cedar Rapids—T. M. Sinclair Co., Ltd., 3rd St. and 16th Ave., having plans prepared by A. C. Pryor, engr., c/o owner, for 10,000 yd. concrete paving in yards at plant.

Ia., Humboldt—City soon receives bids for 15 blocks of paving. C. H. Currie, Webster City, engr.

Ia., Onawa—City soon receives bids for 83 blocks of paving. W. E. Standeven, 4911 Webster St., Omaha, Neb., engr.

Ia., Sioux City—T. H. Johnson, city engr., receives bids about May 3, for 24 blocks paving, 42 ft. wide. Work involves 15168 lin.ft. concrete curbing, 15,168 lin.ft. concrete gutter and 35,400 sq.yd. concrete.

Ia., Sioux City—City soon lets contract repaving 6000 sq.yd. Wall St. viaduct and 3200 sq.yd. 4th St. viaduct, 40 ft. wide. Work involves 9200 sq.yd. vitr. brick, wood block, asphalt, concrete or bituminous concrete. T. H. Johnson, city engr.

Minn., Aitkin—Comrs. Aitkin Co. plan to grade and gravel 30 mi. state-aid road, 24 ft. wide. About $150,000. Work involves 150,000 cu.yd. earth excav. and 30,000 cu.yd. gravel surfacing. T. J. O'Hara, co. engr.

Minn., Bagley—Comrs. Clearwater Co. plan to grade and gravel 16 mi. state-aid road, 24 ft. wide. About $80,000. Work involves 90,000 cu.yd. earth excav. and 19,000 cu.yd. graveling and surfacing. B. F. Umland, co. engr.

Minn., Carlton—Comrs. Carlton Co. plan to grade, gravel and build bridges and culverts on 20 mi. state-aid road, 24 ft. wide. About $300,000. Work involves 120,000 cu.-yd. earth excav. and 24,000 cu.yd. grading and surfacing. P. D. Mold, co. engr.

Minn., Duluth—Comrs. St. Louis Co. plan to expend $47,500 for roads in 1st Dist.; $140,000 in 2nd Dist.; $57,500 in 3rd Dist.; $155,000 in 4th Dist.; $235,000 each in 5th and 6th Dists.; $280,000 in 7th Dist. R. W. Acton, Courthouse, engr.

Minn., Foley—Comrs. Benton Co. plan to grade and gravel 22 mi. state-aid road, 24 ft. wide. About $100,000. Work involves 110,000 cu.yd. earth excav. and 26,000 cu.-yd. gravel surfacing. J. L. Tierney, co. engr.

Minn., Grand Marais—Comrs. Cook Co. plan to grade, gravel and build bridges and culverts on 7 mi. state-aid road, 24 ft. wide. About $80,000. Work involves 70,000 cu.yd. earth excav. and 84,000 cu.yd. gravel.

Minn., Mankato—Comrs. Blue Earth Co. plan to pave 7 mi. state-aid road, 18 ft. wide. About $175,000. Work involves 35,-000 cu.yd. earth excav. and 74,000 cu.yd. paving. N. Moe, co. engr.

Minn., Minneapolis—Comrs. Hennepin Co. plan to grade, gravel and build bridges on 12 mi. road from Cedar to Farmington Aves., 30 ft. wide. About $200,000. E. E. Terrell, Courthouse, engr.

Minn., Moorhead—Comrs. Clay Co. plan to grade, gravel and surface 12 mi. state-aid road project, 24 ft. wide. About $60,-000. Work involves 50,000 cu.yd. earth excav. and 14,000 cu.yd. graveling and surfacing. E. Martinson, co. engr.

Minn., New Ulm—Comrs. Brown Co. plan to grade and build bridges and culverts on 8 mi. state-aid road, 18 ft. wide. About $200,000. Work involves 24,000 cu.yd. excav. and 84,000 cu.yd. paving. C. N. Robertson, co engr.

Minn., St. Paul—Comrs. Ramsey Co. plan to grade and gravel 1½ mi. Anoka Co. line Rd. from Centerville, west. About $10,000. G. J. Ries, co. aud.

Minn., Windom—Comrs. Cottonwood Co. plan to grade, gravel and build culverts on 15 mi. state-aid road, 24 ft. wide. About $60,000. Work involves 80,000 cu.yd. earth excav. and 18,000 cu.yd. graveling. D. R. Savage, co. engr.

Montana—State Highway Comn., Helena, receives bids about April building following Federal-Aid roads:

Big Horn Co., Hardin-Custer Rd., 2.02 mi. gravel surfaced road, 18 ft. wide, 9 to 12 in. thick, about 4000 cu.yd. excav., $12,532. Carbon Co., Black and White Trail, 2.69 mi. gravel surfaced road, 10 ft. wide, 6 in. thick, about 19,000 cu.yd. excav., $17,551. Dawson Co., Red Trail, east of Glendive, 7.5 mi. gravel surfaced road, 9 ft. wide, 6 in. thick, about 12,000 cu.yd. excav., $21,940; Red Trail, west of Glendive, 9 mi. gravel surfaced road, 9 ft. wide, 6 in. thick, about 9500 cu.yd. excav., $21,368. P. D. Pratt, engr. Noted Jan. 23.

Mont., Bigtimber—Sweet Grass Co. voted $100,000 bonds to improve roads and bridges. Noted Mar. 26.

Mont., Dillon—City plans to pave 26,257 sq.yd. Montana and Idaho Sts., with connecting cross streets. About $75,000. G. V. Elder, Dillon, engr.

Mont., Ekalaka—Carbon Co., plans to build roads and bridges. About $30,703 and $8,960 respectively available for projects. A. B. Cooley, Red Lodge, engr.

Mont., Thompson Falls—Sanders Co. plans to grade and gravel 11 mi. Plains-Eddy Rd. About $20,000. T. Johnston, co. surv. Federal Government asked to appropriate toward cost.

Arkansas—Comrs. Rd. Impvt. Dist. No. 1, at office of State Highway Comn., Little Rock, soon lets contract building 37 mi. road, Boone Co. About $3000 per mile.

Arkansas—W. C. Ross, state highway engr., Little Rock, soon lets contract for 10 mi. road in Impvt. Dist. No. 5, Prairie Co., 22 ft. wide, involving 25,460 cu.yd. earth excav., 354 cu.yd. rein.-con. in culverts, 40 lin. ft. steel bridge and 60,000 tons crushed stone. Alternate bids on gravel with 70,225 gal. asphalt surface treatment.

Ark., Marion—Comrs. Rd. Impvt. Dist. No. 6, Crittenden Co., soon let contract building 62 mi. gravel road including bridges and culverts. J. E. Fry, Earle, engr. for district.

Ark., Pine Bluff—Comrs. Rd. Impt. Dist. No. 5, Jefferson Co., soon lets contract resurfacing 10 mi. old macadam road with bituminous covering and repairing drainage structures. Parkes Eng. Co., Citizens Bank Bldg., engrs.

Tex., Bastrop—Bastrop Co. voted $250,-000 bonds to build roads in Elgin Precinct; $35,000 in Paige Precinct, and $35,000 in McDade Precinct. Noted Feb. 27.

Tex., Beeville—Bee Co. election Apr. 19, to vote on $600,000 bonds to build roads.

Tex., Brownsville—Cameron Co. voted $300,000 bonds to build county's part of State Highway No. 12, from here to Hidalgo Co. line at La Feria, 27 mi. long, heavy gravel base, bituminous top.

Tex., Cameron—Milam Co., Branchville Rd. Dist. No. 14, voted $25,000 bonds to build road between 2 highways.

Tex., Cameron—Milam Co. plans to vote on $20,000 bonds to build roads in Dist. No. 23; $15,000 in Dist. No. 20, and $10,000 in Dist. No. 24.

Tex., Coleman—Comrs. Coleman Co. Precinct No. 2, voted $100,000 bonds to build roads.

Tex., Georgetown—Williamson Co. election Apr. 19 to vote on $1,500,000 bonds to build roads.

Tex., Giddings—Comrs. Lee Co. rejected bids received Mar. 4, building 16 mi. gravel road. Work will be readvertised.

Tex., Granbury—Comrs. Hood Co. voted $140,000 bonds to build 140 mi. hard surfaced road from Ft. Worth to Brownwood.

Tex., Greenville—Comrs. Hunt Co. voted $2,000,000 bonds to build roads.

Tex., Henderson—City voted $50,000 bonds to pave streets.

Tex., Huntsville—City Council passed resolutions authorizing paving Main St. from courthouse to main entrance of San Houston normal school, with 6. in. rein.-con.

Tex., Kaufman—Kaufman Co., (3 precincts) voted $1,450,000 bonds to build highways.

Tex., Kingsville—Kleberg Co. voted $350,000 bonds to build Sect. 12, King of Trails Highway, gravel type base with bituminous surface.

Tex., Mt. Pleasant—Comrs. Titus Co. voted $1,000,000 bonds to build roads.

Tex., Mt. Vernon—Comrs. Franklin Co. voted $500,000 bonds to build roads.

Tex., Port Arthur—City had plans prepared paving with shell, 40 mi. streets in residential section, 16 ft. wide. About $275,000.

Okla., Bristow—City had preliminary plans prepared by Benham Eng. Co., engrs., 1300 Colcord Bldg., Oklahoma, paving various streets with brick. About $70,000.

Okla., Madill—City had preliminary plans prepared by Benham Eng. Co., engrs., 1300 Colcord Bldg., Oklahoma, paving various streets with concrete. About $75,000.

Idaho, Blackfoot—Bingham Co. election Apr. 12 to vote on $600,000 bonds to build roads and bridges.

Utah, Richfield—City plans to pave, curb, gutter and drain streets in Dist. No. 1. About $130,000.

Utah, Vernal—Unita Co. election Apr. 10, to vote on $150,000 bonds to improve roads.

Washington—State Highway Comn., Olympia, rejected all bids received Mar. 17, grading, draining and surfacing 2 mi. Inland Empire Highway, Ferry Co.; 13.8 mi. Sunset Highway from Water[illegible]le, east, Douglas Co., 14.95 mi. Central Washington Highway from Sprague to Cheney, Spokane and Lincoln Counties and 5.3 mi. Sunset Highway in vicinity of Baird, Douglas Co. Noted Mar. 6.

Wash., Anacortes—City plans to improve 35th St. About $31,508. F. D. Cartwright, city clk.

Wash., Chehalis—Lewis Co. has $440,000 available from state and Federal road funds for road and bridge work during 1919. Plans include completing 7 mi. gap on Pacific Highway from here to Toledo, cost, $180,000; Pacific Highway to Mayfield, $100,000; State Rd. No. 18, from Morton to Glenoma, $40,000; from Fiffe to Lewis, $80,-000; building Nesika bridge span, $20,000; Toledo bridge, 180 ft. steel span with paved approaches, $100,000.

Wash., Mt. Vernon—City having plans prepared for paving and curbing 1700 ft. Lawrence and 6th Sts., 24 ft. wide, 1 course concrete or bituminous concrete on concrete base or bituminous macadam on block base. About $14,250.

Wash., Port Angeles—City plans to improve streets constituting road from city to Ocean View cemetery. Cost between $20,000 and $30,000.

Oregon—State Highway Comn., Portland, having surveys made and estimates prepared paving road from Astoria to Seaside; Clatsop Co. appropriated $65,000 toward cost, balance to be borne by state; paving Pacific Highway through Jackson Co. R. A. Booth, comr.

Ore., Astoria—City soon lets contract hard surfacing Astor St. from 2nd to 19th Sts. G. T. McClean, city engr.

Ore., Enterprise—City voted $25,000 bonds to pave various streets.

Ore., Marshfield—J. W. Butler, city recorder, receives bids about May 1, hard-surfacing and building concrete walks on Bway. from Market Ave. to Front St., N., 1 block Park Ave. west of Bway., Elrod Ave. and 6th St. About $46,420. E. K. Burton, city engr.

Ore., Portland—City considering hard-surfacing 18 ft. center strip of East 39th St. from Francis Ave. to Powell Valley Rd.; full width of Francis Ave. from Kenilworth Addition to East 42nd St.; Bway. from East 45th St. to Sandy Blvd.; East 53rd St. from East Glisan to East Hoyt Sts., East 47th St. O. Laurgaard, city engr.

Ore., Portland—City soon lets contract improving Gloucester, Hereford and Hodge Sts., artificial stone or asphalt on concrete foundation, not less than 3 in. deep. O. Laurgaard, city engr.

Ont., Toronto—Toronto & York Good Rds. Comm. soon lets contract building water-bound macadam and concrete roads, also number of concrete bridges. About $80,000. E. A. James, 57 Adelaide St., E., engr.

P. E. I., Charlottetown—City plans to pave 25,000 to 35,000 yds. streets, asphalt or bitulithic. J. J. McKinnon, 41 Queen St., chn. street com.

BIDS DESIRED

Me., Auburn—Until Apr. 24, by city, improving and paving 12,000 sq.yd. various streets, vitr. block, concrete or granite block. G. W. Bumpus, city clk.; advertised in this issue. Noted Mar. 13.

Massachusetts—Until Apr. 8, by A. W. Dean, comr. state highways, Boston, building 10,000 ft. highway, 18-24 ft. wide, Danvers Twp., involving 4200 cu.yd. earth, 1050 cu.yd. rock excav., 300 cu.yd. borrow, 7400 cu.yd. broken stone, 45,000 gal. bituminous material, 1670 ft. 10-18 in. vitr. pipe, 72 ft. 12 in. c.i. pipe, 5400 ft. fence and 3900 cu. yd. stone filling.

Rhode Island—Until Apr. 16, by State Bd. Pub. Rds., State House, Providence, furnishing and applying 485,000 gal. asphaltic oil or refined tar to macadam sections of state highway. Roads to be treated are divided into 3 divisions and separate bids will be received for furnishing and applying oil or tar on each division; advertised in this issue.

New York—Until Apr. 17, by State Highway Comn., 55 Lancaster St., Albany, building roads in following counties:

Albany Co., Coeymans-Indian Fields Rd., Part 1, involving 4400 cu.yd. earth excav., 10 cu.yd. rock, 15 lin.ft. 12 in., 75 lin.ft. 20 in., and 100 lin.ft. 6 in. vitr. clay pipe, 14 ton c.i. pipe, 350 cu.yd. concrete, 2500 lb. iron and steel, 825 cu.yd. broken stone, 200 cu.yd. field or quarry stone, 500 cu.yd. bituminous macadam, 2000 cu.yd. cement concrete, 1800 sq.yd. stone block, 13,500 gal. bituminous material, 10,100 lin.ft. concrete curbing, cost, $73,000.

Chemung Co., Horseheads-Cayuta Rd., 90

Streets and Roads (Continued)

cu.yd. earth excav., 45 cu.yd. concrete, 60 cu.yd. concrete pavement, 250 ft. round timber grubbing in place, 325 cu.yd. gravel, cost, $5,000.

Erie Co., Evans Center-Farnham Rd., 50 cu.yd. rock excav., 26,000 cu.yd. earth excav., 20 ton c.i. pipe, 419 cu.yd. concrete, 100 tons broken stone, 9400 cu.yd. cement concrete pavement, 1000 cu.yd. slag, 380,600 sq.ft. metal reinforcement, $182,100; Marilla-Wales Center Rd., 33,000 cu.yd. earth excav., 75 cu.yd. rock excav., 1200 lin.ft. 6 in. vitr. clay drain, 14 tons c.i. pipe, 530 cu.yd. concrete, 2150 cu.yd. gutters, 4800 lb. steel and iron, 8475 cu.yd. cement concrete pavement, 224,000 sq.ft. metal reinforcement, $186,800.

Fulton Co., Oppenheim-Dolgeville Rd., 22,000 cu.yd. excav., 500 cu.yd. rock excav., 50 ft. 18 in. and 500 lin.ft. 6 in. clay pipe, 2 tons c.i. pipe, 395 cu.yd. concrete, 454 cu.yd. broken stone, 8230 cu.yd. field or quarry stone, 3875 cu.yd. water bound macadam, 15,500 gal. bituminous material, $100,100.

Herkimer Co., Van Hornesville-Starkville Rd., 22,500 cu.yd. earth excav., 1000 cu.yd. rock excav., 50 lin.ft. 12 in., 80 lin.ft. 15 in. and 50 lin.ft. 24 in. vitr. clay pipe, 2500 lin.ft. 6 in. porous clay pipe, 1040 cu.yd. concrete, 2750 sq.yd. cobble gutters, 7750 lb. steel and iron, 450 cu.yd. broken stone, 1600 cu.yd. field or quarry stone, 4650 cu.yd. waterbound macadam, 17,000 gal. bituminous material, $152,600; Paines Hollow-Stonehouse Rd., 28,500 cu.yd. earth excav., 100 cu.yd. rock excav., 100 lin.ft. 12 in. and 100 lin.ft. 24 in. vitr. clay pipe, 100 lin.ft. 6 in. porous tile pipe, 585 cu.yd. concrete, 4360 sq.yd. cobble gutter, 8380 cu.yd. field or quarry stone, 3910 cu.yd. waterbound macadam, $134,000.

Oneida Co., North Western-Boonville Rd., Part 1, 42,000 cu.yd. earth excav., 500 cu.yd. rock excav., 100 lin.ft. 6 in. vitr. clay drain, 600 lin.ft. 6 in. porous tile, 860 cu.yd. concrete, 6800 lb. iron and steel, 180 cu.yd. broken stone, 9710 cu.yd. field or quarry stone, 4240 cu.yd. waterbound macadam, 15,500 gal. bituminous material, $141,700; North Western-Boonville Rd., Part 2, 38,000 cu.yd. earth excav., 600 cu.yd. rock excav., 820 cu.yd. concrete, 9050 cu.yd. field or quarry stone, 3950 cu.yd. waterbound macadam, $131,500.

Putnam Co., Patterson-Dutchess Co., line Rd., 6000 cu.yd. earth excav., 1500 cu. yd. rock excav., 100 lin.ft. 6 in. vitr. clay underdrain, 200 cu.yd. concrete, 1500 lb. metal reinforcement, 3190 cu.yd. field or quarry stone, 1120 cu.yd. bituminous macadam, 29,000 gal. bituminous material, $39,400.

St. Lawrence Co., Massena-Winthrop Rd., Part 1, 20,200 cu.yd. earth excav., 277 cu.yd. concrete, 720 sq.yd. cobble gutters, 10,500 cu.yd. field or quarry stone, 3800 cu.yd. bituminous macadam, 103,000 gal. bituminous material, $104,299; Nicholville-St. Regis Rd., Part 1, 18,600 cu.yd. earth excav., 650 cu.yd. rock excav., 285 cu.yd. concrete, 1625 sq.yd. cobble gutter, 5440 cu.yd. field or quarry stone, 2390 cu.yd. bituminous macadam, 64,400 gal. bituminous material, $71,212.

Tompkins Co., South Lansing-Myers Rd., 10,500 cu.yd. earth excav., 200 cu.yd. rock excav., 1000 lin.ft. 20 in. vitr. clay pipe, 250 cu.yd. concrete, 2000 sq.yd. concrete gutter, 4350 cu.yd. field or quarry stone, 1745 cu.yd. waterbound macadam, $60,100.

Washington Co., Whitehall-Dresden Rd., Part 2, 69,200 cu.yd. earth excav., 970 cu.yd. concrete, 2900 lin.ft. wooden guard rail, 5500 cu.yd. broken stone, 2900 cu.yd. field or quarry stone, 4000 cu.yd. bituminous macadam, 95,800 gal. bituminous material, $213,738.

Wayne Co., Pittsford-Palmyra Rd., Part 3, 11,000 cu.yd. earth excav., 50 cu.yd. rock excav., 500 lin.ft. 6 in. vitr. tile drain, 20 tons c.i. pipe, 200 cu.yd. concrete, 2100 lb. reinforcement, 80 cu.yd. broken stone, 4945 cu.yd. cement concrete pavement, 1300 cu.yd. gravel, $71,498.

Wyoming Co., Perry Center-Moscow Rd., Part 1, 10,000 cu.yd. earth excav., 100 cu.yd. rock excav., 1000 lin.ft. 6 in. vitr. clay pipe, 190 cu.yd. concrete, 1700 sq.yd. cobble gutters, 2250 lin.ft. wooden guard rail, 1600 cu.yd. field or quarry stone, 2075 cu.yd. bituminous macadam, 55,500 gal. bituminous material; $81,600, also repairing roads in following counties:

Chenango Co., resurfacing Guilford Rd., involving 600 cu.yd. field or quarry stone, 990 cu.yd. bituminous macadam, 26,650 gal. bituminous material, $14,848.

Dutchess Co., rebuilding Northeast Center-Sharon Sta. Rd., 5400 cu.yd. excav., 6150 cu.yd. field or quarry stone, 2290 cu.yd. bituminous macadam, 55,000 gal. bituminous material; advertised in this issue.

N. Y., New York—Until Apr. 29, by L. Nixon, supt. pub. wks., Capitol, Albany, paving portions of terminal sites at Mott Haven, Greenpoint and Gowanus Bay, contr. 44-P. Work involves 2700 cu.yd. excav., 1900 cu.yd. 3rd class concrete, 12,000 lb. c.i. pipe and specials, 1900 lin.ft. concrete curb and edging, 2100 sq.yd. macadam pavement, 10,000 sq.yd. stone block pavement, 2500 sq.yd. relaid stone block pavement, 1125 sq.yd. asphalt pavement, etc., about $94,340; advertised in this issue.

N. J., Irvington—Until Apr. 7, by city comrs., curbing Stuyvesant Ave. from city line to Lyons Ave., involving 8550 lin.ft. concrete; paving and curbing Grove Terrace from Grove St. to East Speedway Ave., 1510 lin.ft. concrete curbing and 2510 sq.yd. concrete paving; furnishing and applying 20,000 gal. tarvia B and 7000 gal. asphalt binder; furnishing 1000 tons ¾ in. screenings, 500 tons ¾ in. and 500 tons 1½ in. stone trap rock; laying 175 ft. 4 in. sewer connections in Stuyvesant Ave. from city line to Lyons Ave. I. J. Casey, Jr., Town Hall, engr.

N. J., Newark—Until Apr. 8, by T. L. Raymond, dir. dept. streets and pub. impvts., repaving Niagara St. from Ferry to Rome Sts., involving 8100 sq.yd. asphalt.

Pa., Clarksville—Until June 10, (change of date) by A. M. Custer, boro clk., laying about 1300 lin.ft. waterbound macadam and one course concrete pavement, 24 ft. wide. Noted Mar. 20.

Pa., Johnstown—Until Apr. 12, by W. Mosholder, pres. bd. superv. Upper Yoder Twp., building 28,500 lin.ft. Millcreek Rd., 3 in. vitr. block on concrete base. Bids will also be accepted for furnishing, unloading, hauling and stacking 3500 M 3 in. vitr. blocks, 12,000 barrels Portland cement, 2000 lin.ft. 24 in. rein.-con. pipe, 2000 lin.ft. 30 in. rein.-con. pipe and 2000 lin.ft. 12-24 in c.i. pipe. F. B. Barnhart, Swank Bldg., attorney for supervs.; advertised in this issue.

Pa., Pittsburgh—Until Apr. 15, by J. P. Moore, controller, Allegheny Co., building 5300 ft. Renton Rd., from Plum to Renton Twps., Telford macadam, 16 ft. wide. R. V. Warren, Court House, engr.

Pa., Pittsburgh—Until Apr. 22, by Comrs. Allegheny Co. building 2900 ft. Duncan Ave., from Butler Plank Rd. to Butler Pike, Hampton Twp., 18 ft. wide, Telford macadam. R. V. Warren, co. engr. Noted Mar. 27.

Pa., Springdale—Until Apr. 11, by H. J. Barnes, boro. secy., improving Pittsburgh St. Work involves 5430 cu.yd. grading, 13,600 lin.ft. concrete curb, 600 lin.ft. backing curb, 70,000 sq.ft. concrete sidewalk, and 1250 lin.ft. 15-24 in. sewer, etc. Douglass & McKnight, Columbia Bank Bldg., Pittsburgh, boro. engrs.

Pa., Washington—Until Apr. 14, by T. J. Underwood, controller Washington Co., resurfacing with concrete 0.9 mi. Taylorstown Rd., from point near Taylorstown Sta., extending toward village of Taylorstown; 2 mi. Monongahela-Donora Rd., from Black Diamond extending to boro line of Donora; also resurfacing with concrete on concrete base and brick wearing surface ¾ mi. Pike Run Rd. from boro line of Coal Center to point near Crescent power house.

Maryland—Until Apr. 8, by State Rds. Comn., 601 Garrett Bldg., Baltimore, building 2.65 mi. concrete highway from St. Michaels to Claiborne, 26 ft. wide, 3 ft. dirt shoulders, in Talbot Co., Contr. No. T-11. F. A. Zouck, chn., advertised in this issue.

Md., Baltimore—Until Apr. 9, by Bd. Awards, grading and paving 1¼ mi. alleys, 3-10 ft. wide, cement concrete, in various sections of city, Contr. 31, 32 and 33. Work involves 7920 sq.yd. 6 in. cement concrete. Noted Mar. 27.

Md., Hagerstown—Until Apr. 8, by D. A. Wolfinger, clk. Washington Co., building 2.34 mi. St. Pauls Church Rd., concrete or macadam, 14 ft. wide with 5 ft. dirt shoulders, from St. Pauls Church to Pennsylvania line, state aid. J. N. Mackall, 601 Garrett Bldg., Baltimore, engr.

W. Va., Keyser—Until Apr. 15, by Mineral Co. building 12 mi. Class "A" road from Ridgely to Alaska, in Frankfort Dist., State Aid Project No. 36. E. Smith, Piedmont, engr.

N. C., Farmville—Until Apr. 10, by R. E. Belcher, mayor and Bd. Comrs., for 25,000 or 50,000 sq.yd. asphalt, bitulithic, brick or other pavement, 15,000 lin.ft. granite or concrete curb, 15,000 lin.ft. concrete gutter, and 20,000 sq.yd. sidewalk; advertised in this issue.

Ga., Atlanta—Until Apr. 7, by city paving South Pryor, Whitehall, Juniper, Marietta and Sampson Sts. H. L. Collier, city engr. Noted Mar. 20.

Ga., Cairo—Until Apr. 10, by city, building 13,960 sq.yd. asphalt, brick or concrete pavement, 7149 lin.ft. combined curb and concrete gutter or granite curb and concrete gutter. O. H. Lang, Moultrie, consultg. engr.

Ga., Savannah—Until Apr. 14, by Comrs. Chatham Co., furnishing material and labor for building, draining and paving various roads.

Fla., Bronson—Until Apr. 15, by Comrs. Levy Co., grading and surfacing with limestone 15 mi. road from near Lukens to Sumner, thence to Chiefland Dist. D. F. Thomas, Gainesville, engr.

Ala., Selma—Until Apr. 7, by city building concrete sidewalks on both sides of Alabama Ave. from west curb line of Lauderdale St. to east curb line of Satterfield St.; Selma Ave. from east line of King St. to west line of Lauderdale St.; Selma Ave. from east curb of Broad St. to west curb line of Mechanic St. W. O. Christman, city engr.

Miss., Aberdeen—Until Apr. 8, by Bd. Superv. Monroe Co. building 4.46 mi. Lavender and Hamilton Rd. and 4 mi. Aberdeen and Caladonia Rd. Work involves 60,970 yd. grading, 4564 yd. gravel, 87 stations clearing and grubbing and 465 ft. 18-36 in. pipe. G. G. Ray, clk. G. E. Hauser, Columbus Natl. Bank Bldg., Columbus, engr.

La., New Iberia—Until Apr. 21 (change of date), by H. S. Sealy, mayor, paving Main St. and Railroad Ave. About $150,000. Former bids rejected. J. B. McCrary, 3rd Natl. Bank Bldg., Atlanta, Ga., engr. Noted Feb. 20.

La., New Iberia—Until Apr. 8, by city, furnishing labor and material for about 35,000 sq.yd. brick, wood block, sheet asphalt, concrete or bituminous pavement with necessary appurtenances. J. B. McCrary, 3rd Natl. Bank Bldg., Atlanta, Ga., engr.

La., Winnsboro—Until Apr. 8, by Mayor and Bd. of Aldermen, building about 8050 lin.ft. concrete sidewalk, including street crossings and placing vitr. pipe under drains. X. A. Kramer, Magnolia, Miss., consultg. engr.

O., Cleveland—City is receiving bids paving Hege Ave. from East 55th to 58th St., involving 770 cu.yd. excav., 13,175 sq.ft. 4 in. brick on 6 in. concrete foundation, 1045 ft. 5 in. stone curbing, etc.; Dickens Ave. from East 93rd to 91st St., 650 cu.yd. excav., 10,800 sq.ft. 5 in. brick on 6 in. concrete foundation, 778 ft. 5 in. stone curbing, etc.; Claybourne Ave. from West 38th St. to west end, 1595 cu.yd. excav., 42,695 sq.ft. 4 in. brick on 6 in. concrete foundation, 3475 ft. 5 in. stone curbing, etc.; Bernard Ave. from West 105th to 110th Sts., 2025 cu.yd. excav., 29,600 sq.ft. 4 in. brick on 6 in. concrete foundation, 2190 ft. 5 in. stone curbing, etc.; East 57th St. from Hege to Harvard Aves., 575 cu.yd. excav., 9555 sq.ft. 4 in. brick on 6 in. concrete foundation, 785 ft. stone curbing, etc.; McElhattan Ave. from East 136th to 140th Sts., 1850 cu.yd. excav., 21,480 sq.ft. 5 in. brick on 6 in. concrete foundation, 1675 ft. 5 in. stone curbing; Sargent Ave. from West 62nd to 65th St., 500 cu.yd. excav., 13,394 sq.ft. 4 in. brick on 6 in. concrete foundation, 825 ft. 5 in. stone curbing, etc.; West 24th St. from Moore Ave. to north end of Willeyville Allotment, 1305 cu.yd. excav., 25,190 ft. 5 in. brick on 6 in. concrete foundation, 1500 ft. 5 in. stone curbing, etc.; West 24th St. from Franklin Ave. to north end of Willeyville Allotment, 830 cu.yd. excav., 15,585 sq.ft. 5 in. brick on 6 in. concrete foundation, 1215 ft. 5 in. stone curbing, etc.; East 6th St. from Vincent to Euclid Aves., 290 cu.yd. excav., 6300 sq.ft. dressed Medina block on 6 in. concrete foundation, 400 sq.ft. 6 in. concrete sidewalk, etc.; East 58th St. from Hege to Harvard Ave., 520 cu.yd. excav.; 9312 sq.ft. 4 in. brick on 6 in. concrete foundation, 760 ft. 5 in. stone curbing, etc.; East 80th St. from Wade Park to Everett Aves., 420 cu. yd. excav., 8320 sq.ft. 5 in. brick, 715 ft. 5 in. stone curbing, etc.; East 156th St. from Waterloo to Lake Shore Blvd., 2200 cu.yd. excav.; 62,000 sq.ft. 5 in. brick on 58,000 sq.ft. 6 in. concrete foundation, 150 ft. 5 in. stone curbing, 5000 ft. 6 in. curbstone, etc.; Bernard Ave. from West Blvd. to 105th St., 2085 cu.yd. excav., 26,975 sq. ft. 4 in. brick on 6 in. concrete foundation, 1990 ft. 5 in. stone curbing, etc.; grading West 105th St. from Lorain to Thrush Aves., 15,500 cu.yd. excav., etc. R. Hoffman, city engr.

O., Columbus—Until Apr. 13, by G. A. Borden, dir. pub. serv., grading, draining, curbing and paving 630 ft. East Ave. from Olentagy to Kelso Sts., brick or stone block, 24 ft. wide; about $10,970; 210 ft. Neilston St. from Long to Lafayette St., brick or stone block, 36 ft. wide, $5,750; 780 ft. alley

Streets and Roads (Continued)

north of Bryden Rd. from Fairview Ave. to Rhoades St., brick, 20 ft. wide, $8150; 1000 ft. High St. from Poplar Ave. to Cedar St., asphalt 52 ft. wide, $24,240; 1190 ft. Chestnut St. from High to 4th St., asphalt, 52 ft. wide, $29,785.

O., Toledo—Until Apr. 11, by Comrs. Lucas Co., for surface treatment of from 3 to 5 gal. tarvia C. T. to sq.yd. without grit cover of following roads; 16,300 sq.yd. Stitt Rd.; 16,200 sq.yd. Hertzfield Rd.; 22,000 sq.yd. Weckerly Rd.; 12,500 sq.yd. Holloway Rd.; 27,000 sq.yd. Salsbury Rd.; 16,000 sq.yd. Bancroft St.; 24,650 sq.yd. Hill Ave.; 18,000 sq.yd. Migan Ave.; 7500 sq.yd. Glanzman Rd.; 9500 sq.yd. Richards Rd.; 20,600 sq.yd. North Curtice Rd.; 6100 sq.yd. Otter Creek Rd.; 13,500 sq.yd. River Rd.; about $16,788. Also for surface treatment of from 3 to 5 gal. tarvia C. T. on 51,000 sq.yd. Dorr St., No. 24; 46,000 sq.yd. I. C. H. No. 59, No. 30 and Dutch Rd.; 23,000 sq.yd. Albon Rd.; 32,500 sq.yd. Jeffers Rd.; 59,000 sq.yd. Weckerly and Monclova Rds.; 69,000 sq.yd. Waterville-Neapolis Rd.; 51,000 sq.yd. Dorr St. No. 24; 46,000 sq.yd. Hill Ave.; 12,500 sq.yd. Raab Rd.; 34,500 sq.yd. Glendale Ave.; 37,000 sq.yd. Big Ditch Rd.; 37,750 sq.yd. Seamen St.; 90,500 sq.yd. Corduroy Rd.; 27,200 sq.yd. Cedar Point Rd.; 30,000 sq.yd. Richfield Center Rd.; 29,700 sq.yd. Sylvania and Alexis Rds., No. 6 and 54; 16,800 sq.yd. Benore Rd.; 14,800 sq.yd. Suder Ave.; 19,400 sq.yd. Matzinger Rd.; about $87[illegible].0.

Indiana—Bd. Co. Comrs. building roads in following counties:

Apr. 12, Marion Co., Indianapolis, building road between Pike and Washington Twps. L. K. Fesler, co. aud. Wayne Co., Richmond, improving 7000 ft. highway in Wayne Twp. W. H. Brooks, co. aud.

Apr. 21, Clay Co. Brazil, building gravel road on Clay-Putnam Co. line. W. E. Parrish, Clay Co. aud.

Ind., Terre Haute—Until Apr. 20, by Comrs. Vigo Co. building 1 mi. Wm. Dinkle Rd. 20 ft. wide, brick or concrete. About $30,000. R. E. Gibbons, co. engr.

Michigan—Until Apr. 11, by F. F. Rogers, comr. state highway, Lansing, shaping, draining and surfacing 4.992 mi. Rd. No. 28, 12 ft. wide, Class B. gravel, Burnside and Goodland Twps., Lapeer Co. and Maple Valley Twp., Sanilac Co.; 1.993 mi. Rd. No. 208, 12 ft. wide, Class E waterbound macadam, Windsor and Fairhaven Twps., Huron Co.; 3.085 mi. Rd. No. 202, 12 ft. wide, Class B. gravel, Grant and Sheridan Twps., Clare Co.; 5.601 mi. Rd. No. 203, 12 ft. wide, Class B. gravel, Sheridan Twp., Clare Co.; 6.937 mi. Rd. No. 114, 16 ft. wide, trunk line Class B. gravel or slag, Dayton Twp., Tuscola Co. and Rich Twp., Lapeer Co.

Michigan—Until Apr. 8 (change of date) by F. F. Rogers, comr. state highway, Lansing, building 5.585 mi. road between Paw Paw and Kalamazoo, Van Buren and Kalamazoo Counties, Federal Aid Project No. 29. Noted Feb. 27.

Mich., Midland—Until Apr. 15, by village, grading, draining, curbing and paving 3100 ft. Main, Gordon, Ashman, McDonald, Rodd and Townsend Sts., involving 13,792 sq.yd. pavement on old foundation, 11,921 sq.yd. on new 6 in. concrete base, 6651 lin.ft. curbing and 5740 cu.yd. excav. Bids will be received on all types of pavement. About $61,117. F. G. Champe, 610 Nashby Bldg., Toledo, O., engr.

Illinois—Until Apr. 23, by Division of Highways, Springfield, building following sections, Dixie Highway, brick and concrete: Sect. 1, 39,730 ft. long, 16 ft. wide, involving 70,631 sq.yd. pavement, 29,576 cu.yd. excav., 564 cu.yd. concrete in culverts; Sect. 2, 22,854 ft. long, 16 ft. wide, 40,629 sq.yd. pavement, 15,984 cu.yd. excav., 370 cu.yd. concrete in culverts; Sect. G-15d, 5250 ft. long, 16 ft. wide, 9333 sq.yd. pavement, 1500 cu.yd. excav., 239 cu.yd. concrete in culverts; Sect. 4, 20,999 ft. long, 16 ft. wide, 37,332 sq.yd. pavement, 11,631 cu.yd. excav., 332 cu.yd. concrete in culverts; Sect. H-15d, 5600 ft. long, 16 ft. wide, 9955 sq.yd. pavement, 4594 cu.yd. excav., 512 cu.yd. concrete in culverts; all in Iroquois Co. Sect. 5, 44,539 ft. long, 16 ft. wide, 79,180 sq.yd. pavement, 29,075 cu.yd. excav., 809 cu.yd. concrete in culverts; Iroquois and Kankakee Co.; Sect. K-15d, 11,161 ft. long, 16 ft. wide, 19,842 sq.yd. pavement, 7005 cu.yd. excav., 174 cu.yd. concrete in culverts; Sect. 6, 37,757 ft. long, 16 and 18 ft. wide, 70,667 sq.yd. pavement, 21,259 cu.yd. excav., 262 cu.yd. concrete in culverts; Sect. 7, 35,079 ft. long, 18 ft. wide, 70,158 sq.yd. pavement, 19,976 cu.yd. excav., 468 cu.yd. concrete in culverts, all in Kankakee Co. Alternate bids will be received for Portland cement concrete, monolithic brick (3 and 4 in. brick), bituminous concrete with binder course (Spec. C1, C2, C3 or CT), bituminous concrete without binder course (Spec. C1, C2, C3, or CT). Cement will be furnished on all sections by Dept. Pub. Wks. and Bldgs. R. L. Bell, Buchanan-Link Bldg., Paris, engr., dist. No. 4. Noted Mar. 27.

Illinois—Until Apr. 24, by State Highway Comn., Springfield, building Lincoln Highway in following counties:

Du Page Co., 12,400 ft. Sect. G., 18 ft. wide, involving 24,800 sq.yd. pavement, 202 cu.yd. excav., 91,072 cu.yd. concrett in culverts; 9660 ft. Sect. 2, 19,319 sq.yd. pavement, 10,593 cu.yd. excav.; 8207 ft. Sect. 3, 18 ft. wide, 16,413 sq.yd. pavement, 4745 cu.yd. excav.

Kane Co., 3 mi. Sect. L-15d, 18 ft. wide; 5½ mi. Sect. 4, 18 ft. wide; 4½ mi. Sect. 5, 18 ft. wide; Kane and DeKalb Co., 22,591 ft. Sect. 6, 18 ft. wide, 45,183 sq.yd. pavement, 11,650 cu.yd. excav.

DeKalb Co., 25,083 ft. Sect. 7, 18 ft. wide, 50,166 sq.yd. pavement, 11,540 cu-yd. excav.; 14,400 ft. Sect. G, 16 ft. wide, 25,600 sq.yd. pavement, 6144 cu.yd. excav.; 83,052 ft. Sect. 8, 16 ft. wide, 14,848 sq.yd. pavement, 26,020 cu.yd. excav.; 5337 ft. Sect. 18, 6 ft. wide, 3558 sq.yd. pavement, 650 cu.yd. excav.; De Kalb-Ogle Co., 29,300 ft. Sect 9, 16 ft. wide, 52,089 sq.yd. pavement, 22,765 cu.yd. excav.

Ogle Co., 2 mi. Sect. E-15d, 16 ft. wide.

Lee Co., 14,750 ft. Sect. 12, 16 ft. wide, 26,222 sq.yd. pavement, 11,527 cu.yd. excav.; 34,362 ft. Sect. 14, 16 ft. wide, 61,088 sq.yd. pavement, 20,195 cu.yd. excav.; 14,719 ft. Sect. H-15d, 16 ft. wide, 26,167 sq.yd. pavement, 9350 cu.yd. excav.; 34,330 ft. Sect. 15, 16 and 18 ft. wide, 61,091 sq.yd. pavement, 24,420 cu.yd. excav.

Whiteside Co., 24,687 ft. Sect. 17, 16 ft. wide, 43,888 sq.yd. pavement, 16,042 cu.yd. excav.; 10,135 ft. Sect. H, 16 and 18 ft. wide, 18,426 sq.yd. pavement, 7925 cu.yd. excav.

Alternate bids will be received on Portland cement concrete, 3 and 4 in. monolithic brick, bituminous concrete with or without binder course (Spec. C1, C2, C3 or CT). Noted Mar. 27.

Wis., Beloit—Until Apr. 11, by Bd. Pub. Wks., for 72,000 sq.yd. paving, 51,500 lin. ft. curb and gutter and 30,000 cu.yd., excav.; either 4 in. vitr. brick, 3 in. vertical fiber brick, sheet asphalt, asphaltic concrete, reinforced 1 course concrete or plain 1 course concrete pavement. Separate bids will be received on following size jobs: 1000 to 9999 sq.yd., 10,000 to 24,999 sq.yd., and over 25,000 sq.yd. G. E. Heebuik, chn.

Wis., Dodgeville—Until Apr. 11, by E. J. Perkins, comr. Iowa Co., building road from Lake to River Rd., Project No. 34, involving 11,267 cu.yd. earth excav., 190 cu.yd. excav. borrow, 237 cu.yd. Class A concrete, 6.2 cu.yd. concrete catch basins, 41,557 sq.yd. concrete surfacing and 1816 lin.ft. 15 in. sewer pipe.

Wis., Racine—Until Apr. 9, by Racine Co. Highway Comn., building 3 mi. 12th St. Rd., 16 ft. wide. C. R. Weymouth, Stephensen Bldg., Milwaukee, engr. Noted Jan. 9.

Ia., Logan—Until Apr. 8, by city, building 60,000 sq.yd. concrete or monolithic brick pavement, 40,000 lin.ft. concrete curb and gutter and storm sewerage system. C. L. Huff, city engr. Former bids rejected. Noted Mar. 6.

Ia., Sanborn—Until Apr. 7, by Town Council, paving and curbing 56 blocks with concrete, brick, asphaltic concrete or bitulithic pavement, involving 70,000 sq.yd. paving and 39,000 ft. curbing. J. C. Kerrigan, Primgahar, city engr.

Minn., Fergus Falls—Until Apr. 15, by W. Lincoln, aud. Otter Tail Co. building 19.5 mi. Federal Aid Project No. 29, State Rd. No. 2, involving 153,675 cu.yd. earth excav. and 12,315 lin.ft. guard rail.

Minn., Henderson—Until Apr. 8, by F. Hoppenstedt, Gaylord, aud. Sibley Co., grading 7.10 mi. road, Washington Lake and Green Isle Twps., Job No. 1802, involving 32,480 cu.yd. excav., 93,797 cu.yd. overhaul, 446 lin.ft. portable culverts; 2.10 mi. road in Dryden Twp. Job No. 1803, 8173 cu.yd. excav., and 11,761 cu.yd. overhaul; 2.6 mi. road in Henderson and Hesseniand Twps., Job. No. 1903, 26,072 cu.yd. excav., and 12,376 cu.yd. overhaul.

Minn., Redwood Falls—Until Apr. 11, by Comrs. Redwood Co., grading and surfacing State Rd. No. 10, Jobs. Nos. 1702 A and 1702 B, involving 6199 cu.yd. excav. on A and 25,948 cu.yd. on B; State Rds. Nos. 13 and 14, 2 mi. Job No. 1901, involving 8831 cu.yd. excav., 5½ mi. Job No. 1902, 33,640 cu.yd. excav. H. Myron, Redwood Falls, engr.

Minn., Sleepy Eye—Until Apr. 12, by town, building 5½ mi. road and culverts in Home Twp. W. Dey, town clk. Noted Oct. 24.

Minn., Stillwater—Until Apr. 8, by M. A. Nelson, aud. Washington Co., building Job No. 1902, State Rd. No. 6, involving 2.1 acres clearing, 0.7 acres grubbing, 35,793 cu.yd. earth excav., 600 lin.ft. guard rail, 103 cu.yd. concrete retaining walls; furnishing and installing 13,000 lin.ft. 12-24 in. concrete culvert pipe, also hauling and loading 7954 cu.yd. gravel surfacing material, etc.

Minn., Wabasha—Until Apr. 9, by G. J. Ginthner, aud. Wabasha Co. building 3[illegible] mi. Federal Aid Project No. 21, involving 84,141 cu.yd. earth and 1160 cu.yd. rock excav., also 3120 lin.ft. guard rail.

Wyo., Casper—Until Apr. 8 by city grading, draining and paving Dist. 7, asphaltic concrete, bitulithic, topeka mixture or concrete, cost, $20,000; also grading, draining, paving and curbing Dist. 16, sheet asphalt, asphaltic concrete or bitulithic mixture, $50,000. A. W. Wheeler, Casper, engr.

Arkansas—Until Apr. 17, by State Highway Dept., Little Rock, surfacing and building 55 mi. highway from Little Rock to Hot Springs, concrete or asphalt including culverts and bridges, involving 492,000 cu.yd. earth work, 74 acres clearing and grubbing, 110,000 cu.yd. loose rock, 14,000 cu.yd. solid rock, 4300 ft. 12-30 in. culverts, 1994 yd. concrete in culverts and bridges, etc.; advertised in this issue.

Ark., Walnut Ridge—Until Apr. 10, by Comrs. Rd. Impvt. Dist. No. 5, at office of State Highway Comn., Little Rock, building 9 mi. macadam road, Lawrence Co., involving 115 cu.yd. concrete in drainage structures, 5200 cu.yd. grading and 15,432 tons rock. Pritchett & Hight, Walnut Ridge, engrs. Noted Jan. 9.

Okla., Tulsa—Until Apr. 21, by Comrs. Tulsa Co., grading and paving various roads as follows: Miles 1 to 6 inclusive, of Sect. "H"; Miles 1 to 7 inclusive, Sect. "I"; Miles 1 to 2 inclusive, Sect. "A"; Miles 2 to 5 inclusive, Sect. "K"; Miles 1 to 5 inclusive, Sect. "L"; Miles 1 to 5 inclusive, Sect. "N"; Miles 1 to 8 inclusive, Sect. "Q"; Miles 1 to 5 inclusive, Sect. "R"; and Miles 1 to 4 inclusive, Sect. "S." L. Cline, co. clk.

New Mexico—Until Apr. 24, by State Highway Comn., Santa Fe, for Federal Aid road, projects in Colfax Co. from Raton north to Colorado State line; Santa Fe Co. from Santa Fe south to Pankeys gate; Chaves Co. through Mescalero sands and from Roswell to Comanche Springs, about 45 mi. in all.

Wash., Everett—Until Apr. 14, by Comrs. Snohomish Co., surface grading and paving 3 mi. Bond Project No. 30, 16 ft. wide, concrete 5 and 7 in. thick. About $60,000.

Wash., Goldendale—Until Apr. 18, by R. E. Brook, clk. bd. Klickitat Co., Comrs., improving Goldendale-Maryhill Rd.

Wash., Kent—Until Apr. 21, by city, curbing 1 mi. and paving 4 mi. 1st, 2nd, 3rd, 4th and 5th Aves., 20 ft. wide, concrete on 6½ in. concrete base. B. M. McHugh, city engr.

Wash., South Bend—Until Apr. 11, by Comrs. Pacific Co., for concrete paving on Natl. Highway as follows: 1.8 mi. from Nalpee to Stauffers bridge, 9 ft. wide, 2.35 mi. from Stauffers to Lillys bridge, 9 ft. wide, 1.76 mi. from Menlo to Gisseys Crossing, 9 and 18 ft. wide, 1.5 mi. from Raymond city limits to East Raymond, 9 ft. wide. H. A. Gibbs, co. engr.

Wash., Waterville—Until Apr. 8, by Comrs. Douglas Co., grading, draining and graveling 6½ mi. permanent Highway No. 8, 20 ft. wide. Work involves 6735 cu.yd. earth excav., 12,694 cu.yd. gravel, 316 ft. 12-24 in. concrete pipe, etc. Noted Feb. 20.

Ore., Portland—Until Apr. 7, by Comrs. Multnomah Co., improving East 17th St. from Naholem St. to Ochoco Aves., Pacific Highway, Sects. A and B, from macadam road intersection to southerly boundary of Multnomah Co., macadam road from Dakota St. to southerly boundary of city, 92nd St. to points south and north of Foster Rd., cement concrete, 1 course, No. 1, cement concrete course No. 2, asphaltic concrete No. 1 and 2 on crushed stone base. R. W. Hoyd, chn. bd. comrs.

Que., Longueuil—Until Apr. 7, by town, paving with concrete St. Antoine and St. Charles Sts. and du Bord de l' Eau Rd. About $20,000. R. Bournet, secy.-treas.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts—State Highway Com. Boston, let contract grading and draining 17,200 ft. highway between Berkshire, Dalton and Windsor Twps., 18-24 ft. wide, to

Streets and Roads (Continued)

J. Ferguson, Dorchester, $107,666. Work involves 21,900 cu.yd. earth excav., 1000 cu.yd. rock excav., 14,600 cu.yd. stone filling, 375 cu.yd. Portland cement masonry and 1750 tons bituminous macadam on gravel base. Noted Mar. 20.

★**Mass., Boston**—Comrs. Pub. Wks. let contract paving East Newton St., to Bermudez Co., 246 1st St., Cambridge., $12,365. Work involves 4900 sq.yd. asphalt to be laid on present street surface and 2085 lin.ft. concrete curbing.

★**Mass., Brighton** (Boston P.O.)—City let contract paving Bellevista Rd., 40 and 50 ft. wide, to J. F. Lynch, 60 Harriett St., Brighton, $21,262. Work involves 3100 lin.ft. concrete curbing, 15,060 sq.ft. sidewalk, 3200 cu.yd. earth excav. and 4540 sq.yd. asphalt on 7 in. concrete base.

★**Conn., New Haven**—Bd. Pub. Wks. let contract paving (a) Henry St.; (b) Liberty St.; (c) Day St.; (d) Humphrey St., sheet asphalt; (e) Cottage St.; (f) Fillmore St.; (g) Pendleton St.; (h) Chatham St.; (i) Goffe St.; (j) Henry St.; (k) Winthrop Ave.; (l) Clinton Ave.; (m) Goffe St.; (n) Humphrey St., bituminous macadam; (o) Humphrey St., concrete; (p) Spring St.; (q) Union Ave., national pavement, to C. W. Blakeslee Co., 58 Waverly St., (a) $11,191; (b) $6568; (c) $4525; (d) $4950; (e) $8346; (f) $6363; (g) $9765; (h) $15,938; (i) $4986; (j) $14,241; (k) $6867; (l) $7391; (m) 2593; (n) $6812; (o) $11,771; Franklin Contg. Co., 52 Vanderbilt Ave., New York City, (p) $8558; (q) $25,290. Noted Mar. 20.

N. Y., Buffalo—Erie Co. received bids Mar. 18, building 3 mi. East Concord-Springville Rd., Concord Twp., waterbound macadam, from F. J. Mumm Contg. Co., 176 Best St., $37,700; Meyer & Meyer Corp., Depew, $38,282.

N. Y., Buffalo—Erie Co. received bids Mar. 25, building (1) 3.8 mi. Center St., 12 ft. wide, waterbound macadam, Golden Twp., (2) 2.8 mi. Rapids-Greiner Rd. waterbound macadam, Newstead and Clarence Twps., (3) 4.6 mi. Pontiac-Derby Rd., waterbound macadam, Evans Twp., (4) 1 mi. Delaware Ave., concrete pavement on one or both sides of street, Kenmore village, (5) 1 mi. Delaware Ave. Rd., Tonawanda Twp., (a) local stone top (b) slag top (c) imported stone top (d) one side (e) both sides, from E. J. Hessel, East Aurora, (1a) $49,160 (1b) $53,000; Rossney Contg. Corp., 37 Heath St., (1a) $53,900, (1b) $58,000, (3) $37,900, (4d) $30,000, (4e) $58,680; F. W. Knickenberg, 702 Michigan Ave., (1a) $59,300, (1b) $72,675, (4c) $26,500, (4e) $53,000, (5) $26,500; Meyer & Meyer Corp., Depew, (2b) $24,800, (2c) $24,800, (4d) $30,000, (4e) $60,000; Cold Spring Constr. Co., 458 Ellicott Sq., (2b) $22,000, (2c) $22,700; Harrison Eng. Corp., Ellicott Sq., (3) $39,600; F. J. Mumm Contg. Co., 176 Best St., (3) $41,700.

N. Y., New York—F. L. Dowling, pres. Manhattan Boro., received bids Mar. 28, regulating, regrading and repaving roadway, granite block on concrete foundation, building sewers, inlets and basins, in Park Ave. and East 41st St., from Burnside Contg. Co., 270 Burnside Ave., $35,845; Asphalt Constr. Co., 2197 Madison Ave., $37,082; O'Rourke Contg. Co., 150 Nassau St., $37,562. Noted Mar. 20.

N. Y., New York—H. Bruckner, pres. Bronx Boro., received bids Mar. 27, building transverse road, regulating, grading, regrading, etc., paving and repaving East 161st St., Grant, Sherman and Walton Aves., granite blocks and sheet asphalt on concrete foundation, from F. Schneider, Westchester Ave. and Bronx River Rd., $638,327; Terry & Tench, Grand Central Terminal, $665,600; P. T. Cox, 154 Nassau St., $695,484. Noted Mar. 13.

N. J., North Bergen—City received bid repairing 23rd St. from Hudson Blvd. to New Durham Ave. with asphalt block, from Curtin Bros., 45 Madison St., Guttenberg, $17,000. Noted Jan. 9.

N. J., North Bergen—Town received bid improving Liberty Rd., Jefferson, Ferry, Lincoln and River Sts., with belgian block, blue stone curb, from J. Devilin Contg. Co., 114 West 27th St., Guttenberg, $30,000. Noted Mar. 20.

★**Pennsylvania**—State Highway Comn., Harrisburg, let contracts building roads as follows: (a) Adams Co.; (b) Berks Co.; (c) Clinton Co.; (d) Delaware Co.; (e) Elk Co.; (f) Erie Co.; (f1) Springfield Twp.; (f2) Harbor Creek and Northeast Twps.; (f3) Fairview and Girard Twps.; (g) Fayette Co.; (h) Greene Co.; (i) Lancaster Co.; (j) Lawrence Co.; (k) Lehigh Co.; (l) Monroe Co.; (m) Tioga Co.; (n) Warren Co., to M. Bennett & Sons, Indiana, (a) $182,230; Eastern Paving Co., Colonial Trust Bldg., Phila., (b) $53,809; (d) $69,538; Bush & Stewart, Trust Bldg., Williamsport, (c) $113,463; Foundation Co., 233 Bway., New York City, (e) $53,685; (l) $141,627; Highway Constr. Co., Erie, (f1) $54,003; (f3) $99,213; Griff Constr. Co., Erie, (f2) $162,594; Reagan & Lynch, Uniontown, (g) $243,841; Concrete Oil Tank Co., Pittsburgh, (h) $325,490; Souder Constr. Co., 214 East Orange St., Lancaster, (i) $40,483; Burns Bros., 525 South Mill St., New Castle, (j) $38,801; Blaisdell Contg. & Engr. Corp., 238 Spencer St., Brooklyn, N. Y., (k) $240,102; R. J. Delong, Williamsport, (m) $72,816; R. T. Beck, Warren, (n) $203,806. Noted Mar. 27.

Pennsylvania—State Highway Comn., Capitol, Harrisburg, received bids Mar. 28 building roads as follows: (a) Armstrong Co., (b) Berks Co., (c) Bradford Co., (d) Cambria Co., (e) Center Co., (f) Clinton Co., (g) Crawford Co., (h) Elk Co., (i) Erie Co., (j) Franklin Co., (k) McKean Co., (l) Mercer Co., (m) Northampton Co., (n) Potter Co., (o) Warren Co., from Freilino Bros., Leechburg, (a) $191,231; L. H. Hileman Constr. Co., 217 First Natl. Bank Bldg., New Kensington, (a) $197,657; State Constr. Co., 2nd Ave. and 5th St., New Kensington, (a) $201,833; Neumeyer Bros., 1416 East 4th St., South Bethlehem, (b) $96,905; G. Nordinger, E. P. Wilbur Trust Co. Bldg., Bethlehem, (b) $86,766; Hamilton Kapnek Constr. Co., 1365 Ridge Ave., Chicago, Ill., (b) $95,437; Foundation Co., 233 Bway., New York City, (c) $305,527, (h) $266,353; H. G. Schroeder, 416 Mercantile Bldg., Rochester, N. Y., (c) $357,435; Warren Moore & Co., Colonial Trust Bldg., Phila., (c) $297,616; Thermic Coal & Supply Co., Holidaysburg, (d) $70,136; Bd. Supervs. Wilmore, R. D. No. 2 Croyle Twp., Cambria Co., S. Haddon, secy., (d) $54,843; Vipond Constr. Co., 2222 Beale Ave., Altoona, (d) $67,129; G. I. Thompson & Co., Borough Bldg., Clearfield, (e) $13,931; Gifford & Pritchard, Philipsburg, (e) $12,891; Miller Constr. Co., P. O. Box 33, Punxsutawney, (f) $108,746, (h) $249,176; Snyder-Phillips Co., 273 Mt. Pleasant Ave., Phila., (f) $110,995; Burgess & Dorrier, Scottsville, Va., (f) $113,901; Baldwin & Welcomer, Union City, (g) $114,759; Keystone Constr. Co., 131 Mead Ave., Meadville, (g) $116,997; Lynch Constr. Co., 403 Pennsylvania Bldg., Phila., (h) $275,248; Mayer-Blair Constr. Co., 312 Commerce Bldg., Erie, (i) $152,478; (k) $21,618; J. McCormick & Son, 645 West 10th St., Erie, (i) $149,467; J. J. Doyle, trading as J. and M. Doyle, 457 West Third St., Erie, (j) $150,482; D. C. McAleer Constr. Co., 402 Builders Exch., Baltimore, Md., (j) $199,092; Souder Constr. Co., 26 East King St., Lancaster; (j) $186,528; Consolidated Eng. Co., 243 Calvert Bldg., Baltimore, Md., (j) $208,275; P. F. Connolly, Koppel, (k) $20,785; E. M. Love & Son, Corry, (k) $20,787; J. McCormick & Bro., 1009 Poplar St., Erie (l) $160,557; Brackenridge Sand & Gravel Co., Brackenridge, (l) $154,791; Faber Eng. & Constr. Co., 1012 Bessemer Bldg., Pittsburgh, (l) $157,991; Smith McCormick & Co., Inc., and McInerney & McNeal, Inc., Northampton Natl. Bank Bldg., Easton, (m) $327,470; McArthur Bros. Co., 120 Bway., New York City, (m) $318,500; E. B. Arbogast, 16 North 7th St., Stroudsburg, (m) $327,326; Horn & Devling, Galeton, (n) $99,401; Tyne & Willey, 407 Savings Bank Bldg., Binghamton, (n) $99,062; M. Dolan, 35 Fairmount Ave., Jamestown, N. Y., (o) $70,612. Noted Mar. 6.

★**Pa., Dravosburg**—Boro. and Comrs. Allegheny Co., (Pittsburgh), let contract grading, paving and curbing 2250 ft. Richland Ave., 20 ft. wide, to T. Cronin, 17th and Muriel Sts. About $43,692. Work involves 5200 sq.yd. vitr. brick on 6 in. concrete base, 4400 lin.ft. plain concreted curbing, 12,500 cu.yd. earth excav., 300 ft. 15-18 in. pipe and 500 ft. 4 in. tile drain. Noted Mar. 6.

Pa., Stony Creek (Johnstown P.O.)—A. C. Roberts, twp. secy., received lowest bid building 6000 ft. Solomon Run Rd., vitr. fire clay brick on concrete foundation, 18 ft. wide, involving 5000 yd. grading and 1500 ft. guard fence, from E. A. James; about $52,800. Noted Mar. 20.

★**Delaware**—State Highway Dept., Dover, let contract completing Shellpot Park Rd. or Phila. Pike, to Suburban Eng. & Contg. Co., Wilmington, $75,561. Noted Mar. 6.

★**Va., Louisa**—Louisa Co. let contract building 2.52 mi. Bibbs Store Rd., 20 ft. wide, between here and Forks, and 1.72 mi. Kents Store Rd., 20 ft. wide, between here and Bells Cross Rd., to L. J. Chandler, Virgilina, $9474 and $7370 respectively.

★**Va., Portsmouth**—Norfolk Co. let contract building 2 mi. concrete road, 5 in. at side, 7 in. in center, from Ocean View to Willoughby Spit, to A. Coster, 302 Arcade Bldg., Norfolk, $2.09 per sq. yd. Noted Feb. 20.

★**W. Va., Parsons**—Tucker Co. let contract grading 4 mi. road from Parsons to Hendricks, involving 9000 cu.yd. earth excav. and 5000 cu.yd. rock excav., to J. B. Funkhouser, Hambleton, $15,300.

★**N. C., Durham**—Comrs. Durham Co. let contract building 6 mi. Roxboro Rd., bitulithic on old macadam base, to R. G. Lassiter, Oxford. About $60,000.

★**N. C., Greensboro**—City let contract grading, paving and curbing North Mendenhall St., to R. G. Lassiter, Oxford, $22,000. Work involves 7083 sq.yd. asphalt, 5100 lin.ft. concrete curbing and 12,000 cu.yd. earth excav.

★**Ala., Sheffield**—City let contract paving various streets to Foy-Proctor Co., Ind. Bldg., Nashville, Tenn., $210,000.

★**Miss., Yazoo**—Comrs. Yazoo Co., let contract grading draining and graveling 24 mi. road in Beat 1, to Phillips, Nixon & Phillips, Muscle Shoals, Ala.; cost $61,645. Noted Mar. 6.

★**La., Shreveport**—City will pave various streets, involving 140,000 sq.yd. asphaltic concrete. Work will be done by day labor. Noted Mar. 20.

Ohio—State Highway Comm., Columbus, received low bids Mar. 28, building roads as follows:

Columbiana Co., Sect. "Q." Cleveland-East Liverpool Rd., grading, building bridges and culverts and paving with concrete, from Campbell Bros. Co., Stambaugh Bldg., Youngstown, $35,935; J. C. Devine Co., Alliance, $36,484; McLane & Hepburn, Lisbon, $36,584.

Gallia Co., Sect. "H," Ohio River Rd., grading, building bridges and culverts and paving with waterbound macadam, J. A. Jones, Gallapolis, $19,676; R. Wolfe, Gallapolis, $19,998.

Greene Co., Sect. "K," Columbus-Cincinnati Rd., grading, building bridges and culverts and paving with waterbound macadam, Koffroth, Casey & Mansberger, Richwood, $34,935; Wilson Eng. Co., Xenia, $35,979; C. L. Biggs, Findlay, $36,229.

Guernsey Co., Sect. "S," Steubenville-Cambridge Rd., grading, building bridges and culverts and paving with waterbound macadam, S. W. Wrightsel & Son, Logan, $30,680.

Hancock Co., Sect. "G," Findlay-Kenton Rd., grading, building bridges and culverts and paving with asphaltic concrete, Johnston Const. Co., 418 South Clinton St., Chicago, $56,975.

Holmes Co., Sect. "B-1," Millersburg-Wooster Rd., grading, building bridges and culverts and paving with concrete, W. M. Gray, Bowling Green, $76,231.

Knox Co., Sect. "M," Columbus-Wooster Rd., grading, building bridges and culverts and paving with concrete, E. W. Conley, Eaton, $163,690; H. P. Streicher & Co., 319 Terminal Bldg., Toledo, $164,314.

Montgomery Co., Sect. "O-1," Cincinnati-Dayton Rd., grading, building bridges and culverts and paving, Bigler Bros., Middletown, rein.-con., $58,141; York & Studebaker, Greenville, $58,664; Williams & Little Co., Cleveland, $58,684; S. M. Billiter, Covington, Ky., bituminous macadam, $52,663, and $54,476; Renick & Smith, Findlay, $53,338.58 and $55,200; J. Wroe, Dayton, $53,338.58, and $55,200; rock asphalt, $57,012; J. C. McCann, Columbus, $55,200; rock asphalt, E. C. Roudebaugh, Logan, $49,924.

Montgomery Co., Sect. "O-2," Dayton-Cincinnati Rd., grading, building bridges and culverts and paving, A. L. Teegarden, Union City, Ind., rein.-con., $44,846.75; Bigler Bros., Middletown, $46,560; Williams & Little Co., Cleveland, both, $46,560; bituminous macadam, S. M. Billiter, Covington, Ky., $45,673.95, and $46,941; Highway Constr. Co., rock asphalt, Elyria, $45,777 and $45,893; J. Wroe, Dayton, $46,181, and $47,448; J. C. McCann, Columbus, Renick & Smith-Findlay $46,181 and 47,448, rock asphalt, $48,335; E. C. Roudebaugh, Logan, $47,448, rock asphalt, $48,841.

Muskingun Co., Sect. "L-2," Zanesville-Cincinnati Rd., grading, building bridges and culverts and paving with tarbound macadam, Adams Bros., Zanesville, $16,478.

Wayne Co., Sect. "E," Cleveland-Wooster Rd., grading, building bridges and culverts and paving, Lee, Griggs & Anderson, Millersburg, concrete, $137,958; monolithic brick, $143,825, bituminous macadam, $141,075.

Wayne Co., Sect. "A," Ashland-Wooster Rd., grading, building bridges and culverts and paving with monolithic brick, W. S. Newhall Co., Citizens Bldg., Cleveland.

Streets and Roads (Continued)

Wayne Co., Sect. "M-1," Mansfield-Wooster Rd., grading, building bridges and culverts and paving, H. S. Scott, Ashland, concrete, $33,025.62; D. A. Phillips & Son, Ashland, monolithic brick, $33,301. Noted Mar. 20.

★**O., Akron**—City let contract paving 1700 ft. Firestone Blvd., Firestone Park, 32 ft. wide, to McAlonan Bros., 197 West Buchtel Ave., $27,000. Work involves 7120 sq.yd. vitr. brick on 6 in. semi-monolithic base, 3400 lin.ft. granite curbing and 2800 cu.yd. earth excav.

O., Cleveland—City received bids paving (a) Aetna Rd. from East 103rd St. 515 ft. west, involving 910 cu.yd. excav., 15,-116 sq.ft. 4 in. brick on 6 in. concrete foundation, 1120 ft. 5 in. stone curbing, etc.; (b) East 102nd St. from Empire to Kempton Ave., 1030 cu.yd. excav., 21,400 sq.ft. 5 in. brick on 6 in. concrete foundation, 1090 ft. 5 in. stone curb, etc.; (c) Eliot Ave. from East 102nd to East 104th Sts., 600 cu.yd. excav., 17,560 sq.ft. 4 in. brick on 6 in. concrete foundation, 1425 ft. 5 in. stone curb, etc.; (d) Denison Ave. from West 14th to West 25th Sts., 3300 cu.yd. excav., 65,568 sq.ft. 5 in. brick on 6 in. concrete foundation, 1600 ft. 5 in. stone curb; (e) East 143rd St. from Sylvia to Westropp Aves., 1130 cu.yd. excav., 14,400 sq.ft. 4 in. brick on 6 in. concrete foundation, 1240 ft. 5 in. stone curb, etc.; (f) Woodside Ave. from Eddy Rd. to easterly end, 2300 cu.yd. excav., 46,500 sq.ft. 4 in. brick on 6 in. concrete foundation, 3490 ft. 5 in. stone curb, etc.; (g) East 125th St. from Phillips to Castlewood Aves., 1135 cu.yd. excav., 17,050 sq.ft. 4 in. brick on 6 in. concrete foundation, 1110 ft. 5 in. curb, etc.; (h) East 104th St. from Union to Aetna Rds., 1660 cu.yd. excav., 38,815 sq.ft. 4 in. brick on 6 in. concrete foundation, 3115 ft. 5 in. stone curb, etc.; (i) East 103rd St. from Union to Eliot Ave., 1060 cu.yd. excav., 27,490 sq.ft. 4 in. brick on 6 in. concrete foundation, 2170 ft. 5 in. stone curb, etc.; (j) East 103rd St. from Union to Aetna Rds., 2280 cu.yd. excav., 42,440 sq.ft. 4 in brick on 6 in. concrete foundation, 3045 ft. 5 in. stone curb, etc.; (k) Roehl Ave. from Fulton Rd. to West 33rd St., 550 cu.yd. excav., 15,390 sq.ft. 5 in. brick on 6 in. concrete foundation, 1274 ft 5 in. stone curb, etc.; (l) West 91st St. from Denison to Maywood Ave., 2600 cu.yd. excav., 54,746 sq.yd. 4 in. brick on 6 in. concrete foundation, 4460 ft. 5 in. stone curb, etc.; (m) West 90th St. from Denison to Maywood Aves., 2900 cu.yd. excav., 52,845 sq.ft. 4 in. brick on 6 in. concrete foundation, 4330 ft. 5 in. stone curb, etc.; (n) Poe Ave. from West 39th St. to Fulton Rd., 1010 cu.yd. excav., 20,350 sq.ft. 4 in. brick on 6 in. concrete foundation, 1655 ft. 5 in. stone curb, etc.; (o) East 143rd St. from Westropp Ave. to Lake Shore Blvd., 2200 cu.yd. excav., 24,530 sq.ft. 4 in. brick on 6 in. concrete foundation, 1750 ft. 5 in. stone curb, etc.; (p) East 102nd St. from St. Clair to Folk Aves., 370 cu.yd. excav., 13,020 sq.ft. brick, 1060 ft. 5 in. stone curb, etc.; (q) East 102nd St. from Kempton to Adams Aves., 190 cu.yd. excav., 3550 sq.ft. 5 in. brick on 6 in. concrete foundation, 475 ft 5 in. stone curb, etc.; (r) East 102nd St. from Empire to Yale Aves., 160 cu.yd. excav., 3000 sq.ft. 5 in. brick on 6 in. concrete foundation, 400 ft. 5 in. stone curb, etc., from Enterprise Paving Co., 4836 Bway., (a) $10,174; (c) $11,620; (d) $51,979; (i) $17,934; (j) $27,315; (l) $33,929. Baldwin Bros., 226 Avenue Bldg., (a) $10,419; (b) $13,986; (c) $11,670; (d) $51,979; (e) $10,243; (f) $29,803; (g) $11,362; (h) $25,361; (j) $27,369; (k) $9559; (m) $34,091; (n) $12,659; (o) $17,603; (p) $6369; (q) $2842; (r) $1939. Rieley Bros., 357 Arcade, (a) $10,523; (b) $13,935; (k) $9837; (n) $13,089; (p) $6277; (q) $2800; (r) $1926. McHugh Bros., 527 Society for Savings Bldg., (a) $14,005; (f) $29,518; (l) $33,-817; (m) $33,171; (p) $6387; (q) $2731. A. M. Pepa, 527 Society for Savings Bldg., (c) $11,537; (h) $252,118; (i) $17,-792; (j) $27,403. Roehl Bros., West 25th St. and St. Claire Ave., (d) $51,686; (k) $9210; (l) $33,596; (m) $32,939; (n) $12,444. Gould & Maybach, 823 East 150th St., (e) $10,147; (g) $11,373; (o) $17,415. Bentley Bros., 403 Electric Bldg., (e) $10,456; (f) $30,110; (o) $17,961. G. B. Hening & Co., 527 Society for Savings Bldg., (g) $11,261. R. P. Burnett, 527 Society for Savings Bldg., (h) $25,268; (i) $17,780. Cleveland Trinidad Co., 3409 Trumbull Ave., (r) $1839.

★**O., Euclid**—City let contract building sidewalks on Lake Shore Blvd., to F. B. Stein, Euclid, $21,088. Work involves 3500 cu.yd. earth excav., 95,000 sq.ft. 2½ x 6 in. stone, 95,000 sq.ft. 3 x 6 in. stone and 95,000 sq.ft. 2½ in. concrete.

★**O., Steubenville**—City let contract paving 5th St. from Franklin Ave. to the "Dump" vitr. brick and creosoted wood block, to H. M. Bates, Steubenville, $80,704. Noted Mar. 6.

O., Toledo—Lucas Co. received bids building 1.63 mi. Stickney Ave., 14 ft. wide, involving 12,380 sq.yd. waterbound macadam and 4407 cu.yd earth excav., from Vollmayer & McMahon, 412 Erie St., $22,-436; Zeller Bros., Maumee, $22,577; A. M. Doan, 437 Spitzer Bldg., $22,660; 3.2 mi. Grace Rd., 10 ft. wide, involving 19,000 sq.yd. waterbound macadam and 12,000 cu.yd. earth excav., from J. E. Coon, Swanton, $33,270; A. Langdenderfer, 437 Spitzer Bldg., $33,282; 2 mi. Sylvania Ave., 16 ft. wide, involving 19,500 sq.yd. 1-1½-3 concrete, and 6500 cu.yd. earth excav., from R. A. Garrigan, 434 Valentine Bldg., $45,-993; 1.2 mi. Upton Ave., 16 ft. wide, involving 12,000 sq.yd. 1-1½-3 concrete and 11,000 cu.yd. earth excav., from Warner & McKechnie, 320 Nasby Bldg., $34,327; P. H. Watters, 531 Lincoln Ave., $34,805; E. N. Oberle, Grand Rapids, $34,833; 1500 ft. Central Grove Ave., 27 ft. wide, involving 4820 sq.yd. vitr. brick, 4290 sq.yd. bituminous concrete, 3122 lin.ft. stone curbing and 3706 cu.yd. earth excav., from Harris & Tansey, 221 Nasby Bldg., $21,851, brick; Peters Bros. Co., 237 Marion St., $22,496, brick; H. P. Streicher Co., 319 Terminal Bldg., $20,091, asphaltic concrete; 1 mi. Jackman Rd., 16 ft. wide, involving 446 sq.yd. vitr. brick, 9675 sq.yd. 1-1½-3 concrete and 9340 cu.yd. earth excav., from Peters Bros. Co., 237 Marion Bldg., $34,288; Russell & Jennison, 2463 Bway, $34,517; 3.56 mi. Dorr St. from Reynold Rd. to city limits, 18 ft. wide, involving 39,360 sq.yd. 1-1½-3 concrete and 7000 cu.yd. earth excav., from T. P. Garrigan, 434 Valentine Bldg., $96,602. C. L. Rood, Court House Bldg., engr.

★**Michigan**—State Highway Dept., Lansing, let contract extending 10,072 mi. Sheridan Ave. Class B gravel in Saginaw, to W. S. Hinkley, Flushing, $102,198; 3.576 mi. Class B gravel road, Woodbridge and Camden Twps., Hillsdale Co., to Bishop & Rowlson, Hillsdale, $37,797; 11.659 mi. Class B gravel road 15 ft. wide from Saginaw end of Midland Rd., to Midland Constr. Co., Midland, $174,905; 4.335 mi. Class F concrete road in vicinity of village of Farmington, Oakland Co., to R. D. Baker & Co., 1454-56 Penobscot Bldg., Detroit, $175,710.

Mich., Detroit—Dept. Pub. Wks. received bids paving and grading with 1 course concrete, alley, (a) No. 967; (b) No. 968; (c) No. 969; (d) No. 970; (e) No. 971; (f) No. 972; (g) No. 973; (h) No. 974; (i) No. 975; (j) No. 976; (k) No. 977; (l) No. 978; from T. E. Currie, 20 McGraw Bldg., (a) $6139. Otis Cement Constr. Co., 806 Hammond Bldg., (a) $6646; (b) $5802; (c) $4990; (d) $3292; (l) $3150. R. J. Powelson & Co., 1577 Iroquois Ave., (a) $6764; (b) $5440; (c) $4923; (d) $3347; (f) $1729; (h) $5050; (i) $4662; (l) $3194. R. Porath, 1131 McKinley Ave., (b) $5752; (d) $3347. Lennane & McIlvenna, Union Trust Bldg., (c) $4855; (e) $2192; (j) $3827; (k) $2760. Liberty Constr. Co., Penobscot Bldg., (e) $2282; (f) $1740; (i) $4581; (k) $2860. Oakwood Constr. Co., Ford St. and Wabash R. R., (e) $2202; (f) $1687; (g) $1172; (j) $3767; (k) $2847. Talbot Co., 400 Penobscot Bldg., (g) $1139; (h) $4964. E. Meredith, 145 Harper Ave., (g) $1777; (h) $5073; (i) $4625. Delisle & Boston Cement Constr. Co., 819 Free Press Bldg., (j) $3830. Noted Mar. 20.

★**Mich., Detroit**—Dept. Pub. Wks. let contracts paving with asphaltic concrete on 6 in. concrete base, Berea or Amherst curbing, (a) Sheridan Ave., (b) Charlevoix Ave., (c) Beals Ave., (d) Newport Ave., (e) Canfield Ave., (f) Linden St., (g) Barker St., (h) Crane Ave., (i) Roby St., (j) Davison Ave., to Detroit Asphalt Paving Co., 20 McGraw Bldg., (a) $54,269; (b) $26,522; (c) $20,708; (d) $12,572; (e) $8294; (f) $7873; (g) $6262; W. B. Brady Constr. Co., 1972 Grand River Ave., (h) $25,420; (i) $4068; Cleveland Trinidad Paving Co., 2940 Woodward Ave., (j) $15,376. Noted Mar. 27.

★**Mich., Port Huron**—City let contract building sidewalks and cross walks for season Apr. 1, 1919, to Apr. 1, 1920, to Pethke Bros., Port Huron, sidewalks at 17c. per sq.ft.; crosswalk approach 15c. per sq.ft., crosswalk roadbed 18c. per sq.ft.; extra fill $1.00 per cu.yd. and crosswalk drains $1.00 each.

Mich., Port Huron—Comrs. Pub. Wks. received bids paving (a) 8180 sq.yd. Lapeer Ave., from 16th to 24th Sts., 28 ft. wide, involving 5200 lin.ft. curbing, 4000 cu.yd. excav., 5200 lin.ft. side drain, 680 yd sand or cinder fill; (b) 8330 sq.yd. 22nd St. from Griswold to Railroad Sts., 28 ft. wide, involving 4165 cu.yd. excav., 1000 ft. 8 in. sewer, 2700 ft. side drain, 5400 ft. new curbing, 4 manholes, 15 catchbasins, 2 old manholes to grade, 6 catchbasins to reset; (c) 47,120 sq.yd. 10th St. from Military to Water Sts. and 10th Ave. from River St. to Pine Grove Ave., 30 ft. wide, involving 24,000 cu.yd. excav., 7000 yd. filling, 300 ft. 8 in. sewer, 9000 ft. side drain, 400 ft. new curb, 1000 ft. old curb to reset, 4 manholes, 30 catchbasins, 10 old catchbasins to be moved; from J. H. Baker & Sons, Port Huron, (a1) $22,831; (a2) $33,479; (b1) $24,454; (b2) $36,827; (c1) $110,829; (c2), $170,448; O'Sullivan & O'Hara, Port Huron, (a1) $32,882; (a2) $48,013; (b1) $33,872; (b2) $51,448; (c1) $146,988; (c2) $237,039; A. J. Smith Constr. Co., Campau Bldg., Detroit, (a1) $45,739; (b1) $44,,299; (c1) $192,,744; (c2) $272,818.

★**Mich., Port Huron**—Comrs. St. Clair Co. let contracts paving 11.75 mi. concrete road, 18 ft. wide, from Marine City to south line of county, to Worswick Bros., 410 Hodges Bldg., Detroit, $305,000; 11 mi. from St. Clair to Muttonville, to A. J. Smith Constr. Co., Campau Bldg., Detroit, $335,000.

★**Mich., Saginaw**—Comrs. Saginaw Co. let contracts paving 6.7 mi. gravel road, 12 ft. wide, in Lakefield and Marion Twps., to Bennett, McEwen & Crane, Brant, $89,-000; 4 mi. gravel road, 12 ft. wide in Brant and Brady Twps., to Bacon & Bacon, Brady, $36,447.

★**Ill., Belleville**—Bd. Supervs. St. Clair Co. let contract for earth grading and building culverts on road from Belleville south to Hecker, Sect. N-15d, and from Belleville to Millstaft, Sect. M. Route 21, to Tritt Bros., Belleville, $35,000 and $16,000 respectively. Noted Mar. 13.

★**Ill., Rockford**—Winnebago Co. let contract building 29,416 ft. Grant Highway, Sect. H-15d., 18 ft. wide; and 2369 ft. Sect. K, 18 ft. wide, to R. P. Beckstrom, 208 Trust Bldg. About $85,102 and $7131 respectively. Noted Mar. 13.

★**Wis., Kenosha**—City let contract, to C. Peterson, Kenosha, paving, curbing and guttering Durkee Ave., involving 2700 sq.yd. concrete at $2.35 per sq.yd., 950 lin.ft. curbing and guttering, $0.68 per lin.ft.; Julius St., 1967 sq. yd. vitr. vertical fibre brick, $2.66 per sq.yd., 590 lin.ft. curbing and guttering, $0.68 per lin.ft.; South Howland Ave., 12,635 sq.yd. vertical fibre brick on 5 in. concrete base, $2.62 per sq. yd., 3900 lin.ft. curbing and guttering, $0.68 per lin. ft.; Charles St., 3960 sq.yd. vertical fibre brick on 5 in. concrete base, $2.64 per sq. yd., 1500 lin.ft. curbing and guttering, $0.68 per lin. ft.; Middle St., 12,000 sq.yd. vertical fibre brick on 5 in. concrete base, $2.62 per sq.yd., 3000 lin.ft. curbing and guttering, $0.68 per lin.ft.; South Sheridan Rd., 7200 sq.yd. vertical fibre brick on 5 in. concrete base, $2.64 per sq.yd., 1670 lin.ft. curbing and guttering, $0.68 per lin.ft.; North Fremont Ave., 3456 sq.yd. vertical fibre brick on 5 in. concrete base, $2.67 per sq.yd., 972 lin.ft. curbing and guttering, $0.68 per lin.ft.; Wisconsin St., 4800 sq.yd. vertical fibre brick on 5 in. concrete base, $2.64 per sq. yd., 1350 lin.ft. curbing and guttering, $0.68 per lin.ft.; Park Ave., 550 sq.yd. vertical fibre brick on 5 in. concrete base, $2.66 per sq. yd., 150 lin.ft. curbing and guttering, $0.68 per lin.ft.; North Newell St., 5600 sq.yd. vertical fibre brick on 5 in. concrete base, $2.63 per sq.yd., 1500 lin.ft. curbing and guttering, $0.68 per lin. ft.; South Newell St., 2820 sq.yd. vertical fibre brick on 5 in. concrete base, $2.64 per sq.yd., 770 lin.ft. curbing and guttering, $0.68 per lin.ft.; Western Impvt. Co., 9th St., Racine, Howe and Division Sts., North Howland Ave. and Park Row, 15,858 sq.yd. sheet asphalt (type A) on 5 in. concrete base, $2.38 per sq.yd., 5090 lin.ft. curbing and guttering, $0.73 per lin.ft. Noted Feb. 20.

★**Minn., St. Cloud**—Comrs. Stearns Co. let contract building 20 mi. Federal Aid Project No. 25, State Rd. Nos. 1 and 12 as follows: Grading to H. Thursdale & Co., Bemidji, $43,000; surfacing, to Joy Bros., St. Paul; bridges and culverts, to Guarantee Constr. Co., 834 Palace Bldg., Minneapolis, $13,000; concrete culverts, to Con-

Streets and Roads (Continued)

crete Culvert Co., Winona, $2606. Noted Mar. 6.

★Neb., Lincoln—City let contract paving 1900 ft. 26th St., 30 ft. wide, Dist. 299, 3 in. vertical fibre with asphalt filler, to Roberts Constr. Co., 1st Natl. Bank Bldg., $23,051; resurfacing 2040 ft. 17th St., 40 ft. wide, Dist. 71, 2 in. asphaltic concrete over old brick pavement, to Abel Constr. Co., Terminal Bldg., $7842. Noted Mar. 27.

★Mo., St. Louis—City let contracts improving about 2 mi. of following alleys, brick and concrete: (a) No. 881, in block 3061 and 3060 from Koeln to Robert Aves. and its east extension in city block 3061 from Michigan to Virginia Aves.

(b) No. 882, city block 4595A, between Clayton, Berthold and Louisville Aves. and west line of block 4 of Oakland Terrace 1st addition;

(c) No. 883, in block 1283, from Compton to Louisiana Aves. and between Eads and St. Vincent Aves.;

(d) No. 884, in city block 4448 north from Lexington to Natural Bridge Aves. and 124 ft. west of and parallel with Taylor Ave.;

(e) No. 885, in city block 3806 West A, from Ridge to Wells Aves. and between Montclair and Clara Aves.;

(f) No. 886, in city block 5519 between McPherson and DeBaliviere Aves., Kingsbury Pl. and Laurel St.;

(g) No. 887, in city block 5167, from Brannon to Macklind Aves., and between Devonshire and Lansdowne Aves.;

(h) No. 888, in city blocks 3599 and 5039, between Margaretta, Farlin, Fair and Red Bud Aves.;

(i) No. 889, in city block 5445, from Klemm St. to Tower Grove Ave. and between Lafayette and McRee Aves.;

(j) No. 896, in city block 5444 from Klemm St. to Tower Grove Ave. and between DeTonty St. and Lafayette Ave.;

(k) No. 891, in city block 4155, from Russell Pl. to Oak Hill Ave. and between Humphrey and Wyoming Sts.;

(l) No. 892, in city block 1598, from Potomac St. to Fairview Ave. and between Grace and Giles Aves.;

(m) No. 893, in city block 3817 East A, from Minerva to Ridge Aves. and between Temple Pl. and Blackstone Ave.;

(n) No. 894, in city block 3817 East B, from Minerva to Ridge Aves. and between Clara Ave. and Temple Pl., to Eyermann Constr. Co., 1216 South Grand St., (a) $5771; (i) $2832; (j) $2710; (k) $2762; (l) $2063.

T. E. Cavanagh, 6452 Oakland Ave., (b) $3462; (c) $3518.

Skrainka Constr. Co., Security Bldg., (d) $2434.

F. A. Stiers, 4512 Enright St., (e) $2351; (f) $5061; (g) $4559; (m) $1534; (n) $1635.

J. E. Perkinson, 3237 Carter St., (h) $4383. Noted Feb. 20.

★Mo., St. Louis—Bd. Pub. Serv. let contract paving and curbing Minnesota Ave. from Osceola to Merrimac Sts., to Eyermann Constr. Co., 1216 South Grand St., $22,929. Noted Feb. 27.

★Tex., Dallas—City let contract paving Alton St. from Beacon to Henderson Sts., 30 ft. roadway, to Texas Bitulithic Co., Praetorian Bldg., $15,261. Work involves 2738 lin.ft. concrete curbing, 2738 lin.ft. gutter, 105 sq.ft. sidewalk, 850 cu.yd. earth excav., and 4417 sq.yd. asphalt on 5 in. concrete base.

★Tex., Montague—Comrs. Montague Co. let contract building 9 mi. hard surfaced roads, to Womack Constr. Co., Sherman. About $400,000. Noted Nov. 14.

★Tex., San Antonio—City let contract to Uvalde Rock Asphalt Co., Swearington Bldg. for concrete curbs and surfacing roadway with ½ in. rock asphalt on 3000 ft. Michigan Ave. from Russell to Fowler Sts., 30 ft. wide, involving 10,000 sq.yd. asphalt, at $0.50 per sq.yd., 6000 ft. concrete curbing, $0.50 per ft., 3860 ft. Nebraska St. from Walnut to Palmetto Sts., 30 ft. wide, 12,800 sq.yd. asphalt, $0.50 per sq.yd., 7720 ft. concrete curbing, $0.60 per ft.; building concrete curb and surfacing roadway with 2 in. rock asphalt or 1875 ft. Summit Ave. from Blanco Rd. to Capitol Ave., 30 ft. wide, 6250 sq.yd. asphalt, $1.25 per sq.yd., 3750 ft. concrete curbing, $0.60 per ft.; 570 ft. Agarita Ave. from Blanco Rd. to Aganier Ave., 30 ft. wide, 1900 sq.yd. asphalt, $1.25 per sq.yd., 1140 ft. concrete curbing, $0.50 per ft.

★Utah—State Rd. Comn. Capitol, Salt Lake City, let contract building 17,242 ft. road from Centerville to Farmington, 18 ft. wide, involving 34,846 sq.yd. 6-8 in. concrete, to Christensen, Jacobs & Gardner, Salt Lake City, $78,786; building 17,232 ft. road from Clearfield to Sunset, 18 ft. wide, involving 34,466 sq.yd. 6-8 in. concrete, and 15,586 ft. road from Kaysville to Layton, 18 ft. wide, involving 4799 sq.yd. 6-8 in. concrete, to Lynch Constr. Co., 5th West and 2nd South Sts., Salt Lake City, at $87,542 and $75,756, respectively. All roads in Davis Co. Noted Mar. 20.

★Ariz., Clifton—Bd. Supervs. Greenlee Co. let contract building 32½ mi. Sects. 1-6 and part of 7, Clifton-Springerville Rd., to Webster, Webster & Kerby, Clifton, $236,459. Noted Mar. 20.

★Washington—State Highway Comn., Olympia, let contract grading, draining and surfacing 3.6 mi. Pacific Highway, Pioneer, La Center and Clarke Counties, to D. A. Williams, Tacoma, $31,805; 3.4 mi. Inland Empire Highway from Uniontown to Idaho State line, Whitman Co., to H. C. Malott, Seattle, $43,533; 1 mi. State Rd. No. 12, from Methow to Carlton, also building 2 steel bridges, Okanogan Co., to Northwestern Paving Co., Spokane, $35,949; 1.8 mi. Olympic Highway, Grays Harbor Co., to Tuttle & Duffy, Montesano, $17,383. Noted Mar. 6.

Washington—State Highway Dept., Olympia, received bids Mar. 17, clearing, grading and draining (1) 13 mi. Inland Empire Highway from Spokane Co. line to Springdale, Stevens Co., (2) 8.8 mi. Inland Empire Highway from Oakesdale to Garfield, Whitman Co., from Genl. Constr. Co., North 1324 Elm St., (1) $153,474, (2) $42,383; Carlson Norman Co., (1) $159,013; Clifton Applegate Co., Hutton Bldg., (1) $162,069, (2) $45,477; Mitchell Bros., East 127 Mission St., (2) $39,622. All contractors of Spokane. Noted Mar. 6.

★Wash., Seattle—Bd. Pub. Wks. let contract building 1100 ft. timbered trestle roadway, 23 ft. wide, 5 ft. sidewalks at Northlake Ave. connection to approach to Eastlake bridge, to J. A. McEachern Co., Bell St. Dock, $34,097. Noted Mar. 27.

★Wash., Seattle—Bd. Pub. Wks. let contract laying concrete sidewalks on Belvidere Ave., 6 ft. wide, to D. H. Traphagen, Walker Bldg., $21,395; on Orcas St., to Florito Bros., 1630 25th Ave., $31,189. Noted Mar. 27.

Wash., Seattle—Bd. Pub. Wks. received bids Mar. 21, (1) paving, grading, laying armored concrete curbs, etc., on 2½ mi. Leary Ave., 18 ft. wide (a) 6 in. concrete (b) 7 in. concrete (c) 8 in. concrete (2) concrete walks on ½ mi. 1st Ave., S., 6 ft. wide, from Bressi & Morceri, Seattle, (1a) $71,174, (1b) $77,774, (1c) $83,299; Kaiser Paving Co., Everett, (1a) $71,888, (1b) $77,168, (1c) $82,228; R. G. Stevenson, 1327 Ewing St., (1a) $75,302, (1b) $82,522, (1c) $90,172; F. McLellan, Seattle, (2) $22,120; J. L. Smith, Seattle, (2) $22,595; Goetz Bros., Seattle, (2) $22,847. Noted Mar. 13.

Ore., The Dalles—City received only bid from United Constr. Co., Northwest Bank Bldg., Portland, paving 6th, 7th and Lincoln Sts., $11,762; upper Union St., $9110; 9th St., $23,826. Noted Mar 27.

★Quebec—Provincial Government, Quebec, will gravel 31,410 ft. Geneva Rd., and road leading to Carillon, St. Andrew's Parish, Argenteuil Co., 18-22 ft. wide, cost $21,871; also 3.44 mi. Main Rd. and Notre Dame St., Village of Masson, Labelle Co., 18 ft. wide, $22,766. Work will be done by day labor.

Railways

PROPOSED WORK

Oregon—Chamber of Commerce, Portland, having plans prepared for rail connection between Klamath Falls and Portland via, Strahorn project or Natron cut off.

California—See "Miscellaneous," Modesto.

Ontario—Canadian Nat'l. Rys., 27 Wellington St., E., Toronto, soon lets contract building 2 concrete abutments and 2 culverts from Pembroke to North Bay, cost $15,000; 8 concrete abutments and 1 culvert from Ottawa to Quebec, $20,000; 6 concrete abutments and 2 culverts from Toronto to Sudbury, $20,000; 2 concrete abutments and 3 culverts, from Toronto to Ottawa, $15,000. A. F. Stewart, ch. engr.

BIDS DESIRED

Ontario—Until Apr. 9, by A. F. Stewart, ch. engr., Canadian Natl. Rys., 27 Wellington St., E., Toronto, building concrete abutments, piers and culverts along line from Jellicoe to McKindy. About $20,000.

Ontario—Until Apr. 11, by A. F. Stewart, ch. engr., Canadian Natl. Rys., 27 Wellington St. E., Toronto, building 1 concrete culvert and 2 concrete abutments at North Bay. About $20,900.

British Columbia—Until Apr. 15, by M. H. McLeod, vice-pres., Canadian National Rys., 1 Toronto St., Toronto, Ont., building line from Kamloops to Kelowna, including branch from Vernon to Lumby. T. H White, Metropolitan Bldg., Vancouver, ch engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ontario—Hydro Electric Comn. of Ontario, University Ave., Toronto, will build 80 mi. radial electric railway from Toronto to Niagara Falls. About $20,000,000. Work will be done by day labor.

Excavation and Dredging

PROPOSED WORK

N. C., Washington—Drainage—Pitt Co. D. D. soon lets contract building drainage system to cover 15,000 acres in Grindle Creek, between Bethel and Pactolas, involving 23 mi. canal, 8-30 ft. wide at bottom and 16-40 ft. wide at top.

Wis., Milwaukee — Excavation — See "Streets and Roads."

Ia., Nevada—Ditch.—Bd. Supervs. Story Co. plan to widen, deepen and clean out Skunk River Ditch No. 4, from Polk Co. line northwesterly 11 mi., to mouth of Squaw Creek. Ditch will be widened to 140 ft. between Polk Co. line and southeast corner Sect. 25, Washington Twp., and to 130 ft. between Washington Twp. and mouth of Squaw Creek; new cut will be 8.5 ft. About $120,000. W. A. Olson, engr.

Mo., St. Joseph—Drainage—Platte River D. D. No. 1, Buchanan Co., had plans prepared building 16 mi. channel, 40 ft. wide, to drain 10,000 acres along Platte River, Three Forks River and River 102. C. O. Cornelius, secy.-treas., W. D. Hazen, Commercial Bldg., engr. Noted May 9, 1918.

Mont., Twin Bridges—Irrigation—Superior Land Co. receives bids about Apr. 20, building irrigation and drainage system to develop land in Madison Co. Work involves 11.2 mi. irrigation canals with 25 to 2.5 second ft. capacity, main drainage ditch to be 4½ mi. long, bottom width of 2-4 ft., involving 59,500 cu.yd. excav. and 4 laterals 3 mi. long involving 29,500 cu.yd. excav. C. Adams, Twin Bridges, engr.

Idaho, Jerome—Canal—North Side Twin Falls Canal Co., Jerome, plans to build 3½ mi. canal to have capacity of 2000 cu.ft. per second, to replace reservoir. About $75,000. E. B. Darlington, Jerome, engr.

Utah, Ogden—Drainage—Huntsville D. D. No. 1, Weber Co., being organized to build system to drain 10,000 acres. About $50,000.

Ore., Echo—Irrigation—State Irrigation Securities Comn. considering plans for construction of Teel Irrigation project comprising 16,000 acres land near here and 4000 acres on Butte Creek. Water will be taken from Hidaway, Cable and Camas Creek; canal will pass through 2 mi. tunnel, 20 mi. above Pilot Rock. Cost, $1,000,000. About $500,000 available.

Cal., Corcoran—Corcoran Irrigation Dist. will petition Bd. Supervs. Kings Co., Hanford, for authorization to form irrigation district to supply water to irrigate about 50,000 acres land. Water will be brought from Kings, Tule and Kaweah Rivers, Cross and Cameron Creeks, proposed Pine Flat Dam, etc. Plans include construction of dams, reservoirs, canals, wells, installation of pumps, etc.

Cal., Terra Bella—Irrigation—Terra Bella Irrigation Dist. sold $40,000 bonds; proceeds will be used to extend irrigation systems.

BIDS DESIRED

Conn., Bridgeport—Dredging—Until Apr. 11, by B. F. Cooney, clk. bd. park comrs., Security Bldg., dredging 40,000 cu.yd. for filling at Fayerweather Island, Seaside Park; advertised in this issue.

N. Y., New York—Dredging—Until Apr. 29, by L. Nixon, supt. pub. wks., Capitol, Albany, dredging at barge canal terminals, Piers 5 and 6, East River, at Greenpoint and Long Island City, Contr. No. 77. Work involves 38,000 cu.yd. excav. About $40,325; advertised in this issue.

N. C., Beaufort—Drainage—Virginia-Carolina Farms Co., Beaufort, is receiving bids building drainage system to cover 40,000 acres of open black prairie land in Carteret Co., involving 12 separate outlets and 1,700,000 cu.yd. excav. B. M. Potter, Beaufort, engr.

La., Crowley—Ditches—Until Apr. 22, by Iota—Longpoint D. D., Arcadia Parish, for 50 mi. ditch, involving 495,000 cu.yd. excav. L. F. Milner, pres.; advertised in this issue.

Wis., Beloit—Excavation—See "Streets and Roads."

Excavation and Dredging (Continued)

Ia., Clarinda—Channel—Until Apr. 9, by Bd. Supervs. Page Co., building 20,507 ft. channel for East Tarko River in D. D. No. 15, involving 175,390 cu.yd. excav. V. Freed, co. aud.

Ia., Ft. Dodge—Excavation—Until Apr. 15, by C. A. Snook, aud. Webster Co., cleaning out lateral No. 1, D. D. No. 6, 9000 ft. long, 4 ft. wide at bottom, slopes 1 to 1, average depth 4.4 ft., involving 13,000 cu.-yd. excav.

Ia., Mason City—Ditch—Until Apr. 8, by P. Weigand, aud. Cerro Gordo Co., building D. D. No. 57. Work involves 64,200 ft. 6-34 in. tile, 20 cu.yd. concrete headwall, etc. Noted Sept. 26.

Ia., Mason City—Ditch—Until Apr. 9, by P. Weigand, aud. Cerro Gordo Co., building Sect. 4 and 5, Joint D. D. No. 1, in Cerro Gordo Co. (Mason City), Hancock Co. (Garner) and Franklin Co. (Hampton)). Work involves 56,250 ft. 6-36 in. tile. Sect. 4, and 27,970 ft. 6-18 in. tile, Sect. 5.

Ia., Spencer—Ditch—Until Apr. 16, by Bd. Supervs. Clay Co., building D. D. No. 37. Work involves 114,280 ft. 6-26 in. tile A. W. Chamberlain, co. aud.

Minn., Crookston—Ditch—Until Apr. 10, by H. J. Wette, aud. Polk Co., building Co. Ditch No. 121, involving 13,417 cu.yd. excav. About $0.20 per cu.yd.

Minn., Fergus Falls—Excavation—See "Streets and Roads."

Minn., Henderson — Excavation — See "Streets and Roads."

Minn., Redwood Falls—Excavation—See "Streets and Roads."

Minn., Wabasha — Excavation — See "Streets and Roads."

Mont., Whitehall—Irrigation—Until Apr. 10, by Whitehall Irrigation Dist., building 40 mi. canals, involving 200,000 cu.yd. excav. and earth dam, 6 to have capacity of 20,000 acre ft. water. About $200,000. G. Baker, Whitehall, ch. engr. Noted Feb. 20.

Mo., Poplar Bluff—Excavation—Until May 14, by Bd. Comn. Inter River D.D., Butler Co., building 206 mi. open ditch, 12-55 in. wide at base, 8 ft. deep, involving 7,733,500 cu.yd. floating and dry land dredgework. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs. Noted Feb. 13.

Ark., Paragould—Ditch—Until May 6, by St. Francis D.D., at Piggott, for open ditches in Blue Cane Dist., 9 mi. long, 30 ft. bottom, 8 ft. deep, 7 mi. with 12 ft. bottom and 7ft. deep; 13 mi. Grassy Slough D.D. No. 11, 12 ft. bottom, 7 ft. deep, 9 mi. with 45 ft. bottom and 8 ft. deep; also 13 mi. levees in Blue Cane subdistrict, 8 ft. crown, 8 ft. height, 2-1 slopes, involving 500,000 cu.yd. embankment in levees and 1,715,000 cu.yd. floating dredgework. J. R. Rhyne, Corning, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Dorchester** (Boston P. O.)—Dredging—Park Comn., Boston, let contract dredging and cleaning shore and approach to Tenean Beach, involving 13,000 cu.yd. earth excav., to Gerrish Dredging Co., 101 Tremont St., Boston, $13,815; excavating, grading slope and draining areas adjacent to and comprising Tenean Beach, involving 1400 cu.yd. dry earth excav., 5100 cu.yd. filling, 1020 ft. 4-6 in. vitr. clay, to D. M. Biggs & Co., Dorchester, $15,222.

N. J., North Bergen—Excavation—Bd. Educ. received lowest bid excavating sites of 2 schools here, from M. Volfe, 595 10th St., West New York, $6.00 per yd. for rock and $1.60 per yd. for earth. Noted Mar. 20.

★**Md., Claiborne**—Dredging, etc.—State Rds. Comn., 601 Garrett Bldg., Baltimore, let contract dredging 25 ft. channel to wharf, to Furst Dredging Co., 1515 Fidelity Bldg., Baltimore, $10,000; building timber and wooden pile pier and wharf, 128 ft. long, 24 ft. wide on one end and 64 ft. wide on other end, to Bailey & Dodson, Claiborne, $8000. Work involves 137,500 cu.yd. floating dredgework.

★**Miss., Yazoo**—Drainage—See Streets & Roads.

Ia., Mason City—Drainage—Comrs. Cerro Gordo Co. let contract for tile for drainage system in Joint Dist. No. 1, to Cement Products Co., Spencer, $14,225; labor, to W. A. De Long, 3107 East 14th St., Des Moines, $9950.

Minn., Tyler—Ditch—Comrs. Lincoln Co. (Ivanhoe) received only bid building Co. Ditch No. 45, from Gilbert & Myking, Fairmont, $13,680. A. L. Swenson, co. aud. Noted Feb. 6.

Tex., Dallas—Excavation—See "Streets and Roads."

★**Cal., El Centro**—Repairing Levee—Imperial Irrigation Dist. will close break 5600 ft. wide in levee in Mexico, southeast of Calexico involving 92,000 cu.yd. earth work; and also build rock revetment on Volcano Lake levee for about 8 mi. in Mexico, involving 120,000 cu.yd. rock. Work will be done by day labor, as no bids were received Mar. 18. Noted Mar. 6.

Industrial Works

PROPOSED WORK

Me., Pittsfield—McGilvery-Cummings Co. had plans prepared for 2-story, 190 x 220 ft. mill. About $200,000.

R. I., Providence—B. B. Knight Estate, Broad St., soon receives bids building 1 story, 92 x 133 ft. brick and concrete garage, rein.-con. flooring, concrete foundation, on Eddy and Dorrance Sts. About $35,000.

N. Y., Brooklyn—J. Bene & Sons, 641 Dean St., soon receives bids building 2 story, 100 x 100 ft., steel and brick factory, rein.-con. flooring, concrete foundation, on Clinton Ave. near Fulton St. M. Freehof, 405 Lexington Ave., New York City, archt. Noted Mar. 20.

N. Y., Long Island City—Steinway & Sons, 107 East 14th St., New York City, having plans prepared by W. K. Benedict, archt., 527 5th Ave., New York City, for alterations and rein.-con. and steel addition, rein.-con. flooring, concrete foundation, to existing factory on Ditmar Ave. between 15th and 16th Aves. here. About $75,000.

N. Y., New York—W. M. B. Conable, archt., 14 East 46th St., soon lets contract building 2-story, 50 x 100 ft., brick, steel and rein.-con. warehouse, rein.-con. flooring, concrete foundation, on 59th St. and 10th Ave., for W. Zinsser & Co., 195 William St. About $35,000.

N. Y., New York—Industrial School, 418-420 West 41st St., soon receives bids building 4 story, 50 x 99 ft., steel and brick garage, rein.-con. flooring, concrete foundation. About $75,000. G. McCabe, 96 5th Ave., archt. Noted Mar. 20.

N. Y., New York—T. Piercy, 207 Thomson St., having plans prepared by F. E. Vitolo, archt., 56 West 45th St., for 3 story, 39 x 100 ft., steel and brick garage, rein.-con. flooring, concrete foundation, at 125-129 3rd Ave. About $50,000.

N. Y., Niagara Falls—U. S. Alloys Co., River Rd., Buffalo, purchased 30 acre site here and plans to build factory.

N. Y., Watertown—Ice Co. of Watertown, 80 Public Sq., plans to build ice plant with 15,000 ton capacity. Address L. Washburn, c/o company.

N. J., Collingswood—Camden Motor Corp., c/o D. M. Davis, Temple Bldg., Camden, plans to build 2 story, 300 x 350 ft., mill construction factory, rein.-con. flooring, concrete foundation on City Line and White Horse Pike here. About $750,000. Peuckert & Wunder, 310 Chestnut St., Phila., archts.

N. J., Millville—Eastern Potash Co., 120 Bway., New York City, plans to build factory on banks of Raritan River here. About $2,000,000.

N. J., Newton—Mazey Mills Co., 320 5th Ave., New York City, plans to build brick factory here. About $50,000.

Md., Baltimore—Baltimore Machine & Decorating Co., 1st Ave. and 9th St., plans to rebuild 3 story, 50 x 50 ft., steel, concrete and brick factory. Cost between $40,000 and $50,000.

Va., Norfolk—Jersey Queen Corp., 1299 High St., Portsmouth, having plans prepared by Peebles & Ferguson, archts., Norfolk, building 3 story, 84 x 122 ft., rein.-con. factory. About $175,000.

Fla., Ft. Pierce—East Coast Cattle Co., 1425 Ave. D., Miami, soon receives bids building abattoir here. About $100,000.

O., Akron—McNeil Boiler Co., Crosier and Sweitzer Sts., plans to rebuild 90 x 400 ft. brick boiler factory recently destroyed by fire. About $60,000.

O., Cleveland—Clark Mfg. Co., East 38th St. and Perkins Ave., having plans prepared by H. E. Shimmin, archt., 2053 Euclid Ave., building 3 story, 100 x 144 ft. brick, steel and rein.-con. factory addition, rein.-con. flooring, concrete foundation. About $100,000.

O., Cleveland—Dickey-Grabler Wks., 118 Noble St., having plans prepared building 1 and 2 story, 46 x 69 and 106 x 268 ft. brick, steel and concrete factory and office building, concrete foundation, on West 104th St. and Madison Ave. About $75,000.

O., Cleveland—Drake Process Mchy. Co., 1255 West 4th St., plans to build 3 story, 50 x 160 ft. brick, steel and concrete factory, rein.-con. flooring, concrete foundation. About $75,000.

O., Cleveland—Garland Co., 3716 Euclid Ave., having plans prepared by S. H. Weis, engr., 1032 Schoefield Bldg., building 2 story, 48 x 121 ft., brick and steel factory, at 3800 East 91st St. About $30,000.

O., Cleveland—Widlar Co., 722 Bolivar Rd., plans to build 7 story brick, steel and rein.-con. warehouse, concrete foundation, on Orange Ave. About $150,000.

O., Columbus—O. Darst, archt., Brunson Bldg., soon receives bids building 3 story, 43 x 84 ft., brick and concrete factory on Oak St., for Columbus Pharmacal Co., 332 Oak St. About $55,000.

Mich., Battle Creek—City plans election to vote on $400,000 bonds to build lighting plant.

Mich., Detroit—Commerce Motor Car Co., Solvay and Mackie Sts., having preliminary plans prepared by F. J. Winter, archt., 2331 Dime Bank Bldg., for 2 story rein.-con. factory, with 285 ft. frontage on Mackie St.

Mich., Detroit—Detroit Edison Co., David Whitney Bldg., having plans prepared for 30,000 k.w. brick and steel addition to Delray Power Plant, concrete foundation, on West Jefferson Ave.

Mich., Detroit—Schlieder Mfg. Co., East Grand Blvd. and Oakland Ave., having plans prepared by Brown & Preston, archts., 406 Empire Bldg., for 3 story brick and rein.-con. addition to plant, rein.-con. flooring, concrete foundation. About $80,000.

Mich., Grand Rapids—Furniture Manufacturers' Assn. of Grand Rapids, 216 Lyon St., N. W., having plans prepared by Robinson & Campau, archts., 450 Housemann Bldg., for 3-story, 120 x 250 ft. warehouse on Fulton St. W. About $50,000. Noted Dec. 26, 1918.

Mich., Grand Rapids—Kelly Ice Cream Co., Ionia Ave., having plans prepared by Robinson & Campau, archits., 450 Housemann Bldg., for 2-story, 60 x 150 ft. factory on Commerce Ave.

Ill., Charleston—Brown Shoe Co., 17th and Washington Sts., St. Louis, Mo., having plans prepared by L. Herron, engr., c/o owners, building brick and concrete factory, concrete foundation, here. About $100,000.

Ill., Chicago—Pullman Couch Co., 3759 South Ashland Ave., having plans prepared by S. S. Joy, archt., 2001 West 39th St., building 4 story, 125 x 400 ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation, on 38th St. and Ashland Ave. About $275,000.

Ill., Granite City—G. W. Niedring-Hause, vice pres., Natl. Enameling & Stamping Co. and C. Studebaker, c/o Studebaker Corp., and others, purchased 200 acre site and had plans prepared for coke pig iron plant. About $7,000,000.

Wis., Manitowac—Manitowac Seed Co., 1009 South Main St., soon lets contract building 3 story, 40 x 80 ft. warehouse. A. Guttman, pres.

Minn., Edgerton—E. V. Pol plans to build 1 or 2 story, 50 x 150 ft., brick storage warehouse and automobile sales room.

Minn., Fairmont—Sumner Engine Co. had preliminary plans prepared for 50 x 250 ft. factory. C. H. Brodt, pres.

Minn., Minneapolis—Robertson Shoe Co., 315 1st Ave., N., plans to build 3 story, brick and timber factory, brick foundation. About $50,000. G. W. Robertson, pres.

Minn., Minneapolis—Wallace Coach & Carriage Co., 12 East Grant St., plans to build 2 story, brick and timber factory, brick foundation. About $50,000. T. C. Wallace, pres.

Minn., Pipestone—Standard Oil Co., 4th and Oak Sts., Minneapolis, plans to build 2 story, brick filling station, brick foundation, here. About $75,000.

Minn., Red Wing—City soon lets contract building 100 x 100 ft., brick and rein.-con. light and power plant; also new district system. About $350,000. L. P. Wolff, 1000 Germania Bldg., St. Paul, engr.

Minn., St. Paul—Comrs. Ramsey Co. plan to build 40 x 225 ft., brick and stucco stock barn on county farm. About $61,000. Buechner & Orth, 500 Shubert Bldg., archts.

Neb., Clarkson—City soon lets contract rebuilding electric light and pumping plant. Henningson Eng. Co., 1122 Farnum St., Omaha, engrs. Noted Oct. 31.

Neb., Holdrege—City soon receives bids building electric light plant. Bonds for $68,000 voted for project.

Industrial Works (Continued)

Mo., St. Louis—See "Miscellaneous."

Mo., St. Louis—Mineral Refining & Chemical Corp., Iron Mountain tracks and Des Pere River, plans to build addition to plant. About $500,000. A. E. F. Versen, c/o owner, engr.

Mo., St. Louis—Tate & Nordmeyer Eng. Co., archts. and engrs., International Life Bldg., soon receives bids building 146 x 328 ft. cooling plant on 23rd and Papin Sts., for Heil Packing Co., 2216 La Salle St. About $100,000.

Mo., St. Louis—Yawitz Dyeing & Cleaning Co., Suburban and Wittier Sts., plans to build 1 and 2-story, 50 x 135 ft. brick and timber factory, concrete foundation, on Delmar and Walton Sts. About $50,000. S Yawitz, pres.

Mo., Sikeston—City election June 2, to vote on $75,000 bonds to build electric light plant. E. J. Malone, Jr., city clk. Noted Jan. 16.

Ark., Ashdown—United Oil Mills having plans prepared by J. G. Reid, archt., Chicago, rebuilding 2 story, 60 x 130 ft. oil mill recently destroyed by fire. W. Y. Foster, Sr., pres. Noted Feb. 6.

Ark., Springdale—City plans to build lighting plant. About $50,000. W. L. Winters, Ft. Smith, engr.

Tex., McAllen—Rio Grande Motor Co. having plans prepared by A. H. Woolridge, archt., Crow Bldg., building 70 x 113 ft., concrete and brick garage. About $25,000.

Utah, Salt Lake City—Husler Flour Mills, South State St., plans to build 6-8 story flour mill, on 5th South and 3rd West Sts. About $300,000.

Wash., Wenatchee—Standard Oil Co. plans to build storage warehouse, office, garage and lubricating oils storage tank here.

Ore., Pendleton—Standard Oil Co., 409 Ann St., plans to replace and enlarge oil distributing plant. Project includes 24 x 70 ft. brick warehouse and 24 x 68 ft. garage, two tanks 30 ft. high, 20 ft. and 30 ft. in diam.; 4 tanks now at station will be moved to new location and 3 more put in. About $30,000. H. J. Jack, local mgr.

Cal., Modesto—See "Miscellaneous."

Que., Donnacona—Donnacona Paper Co. purchased 183,360 acres timber land on Jaques Cartier River, 27 mi. from Quebec and plans to develop power, including dam, flume, power house and installing electric generating equipment. G. H. P. Gould, Lyons Falls, N. Y, pres.

Que., Montreal—Gagnon & Hebert, 55 Kent St., having plans prepared building 4 story, 100 x 100 ft., brick shoe factory on Kent St. About $75,000.

Que., Montreal—La Reine Mineral Water Co., 1320 Notre Dame St., had plans prepared by A. Piche, archt., 33 Belmont St., building 3 story, 60 x 80 ft., mill construction factory, rein.-con. flooring, concrete foundation, on Duvernay St. About $30,000.

Ont., Cobourg—Douglas Packing Co., Fairport, N. Y., purchased site here and plans to build 3 story canning factory. About $150,000.

Ont., Port Dover—Port Dover Canning Co. plans to build 2 story, 50 x 90 ft., cement block addition to factory. About $25,000.

Ont., Preston—Ice Palace plans to build ice plant. About $30,000.

Sask., Regina—Continental Oil Co., purchased site here and plans to build oil refinery. About $1,000,000.

Alta., Calgary—W. R. Hull & Co., 201 Grain Exch. Bldg., plans to build warehouse. About $25,000. Lawson & Fordyce, 1226 8th Ave. W., archts.

Alta., Medicine Hat.—Ingersoll Oil Co., 918 St. Patrick St., Montreal, Que., soon lets contract building 100 x 100 ft., brick warehouse here. About $56,000. M. D. McLean, Medicine Hat, engr.

B. C., Vancouver—Gardiner & Mercer, archts., 827 Birks Bldg., receive bids about Apr. 10, building 2 story, 50 x 60 ft. pattern shop, 54 x 125 ft. boiler and blacksmith shop, 50 x 250 ft. marine ways of 2000 ton capacity, jetty and office building, on Georgia St., near Coal Harbor, for Mainland Engr. Co., 422 Railway St. About $70,000. Noted Feb. 20.

BIDS DESIRED

N. Y., Long Island City—Until Apr. 15, by A. Cohen, 212-5th Ave., New York City, building 3 story, 73 x 193 ft., brick and steel mill, rein.-con. flooring, concrete foundation, on William and Freeman Sts., here. About $60,000. D. Seabury, 12 East Ave., Pawtucket, R. I., archt. Noted Mar. 20.

N. Y., New York—Until Apr. 12, by J. Fisher, archt., 25 Ave. A, building 2½ story, 70 x 150 ft., brick and steel warehouse, rein.-con. flooring, concrete foundation, 3rd and Tompkins Sts., for Horowitz Bros., 371 East 4th St. About $75,000. Noted Feb. 13.

Ill., Chicago—E. H. Frommann, archt., 64 West Randolph St., is receiving bids for 2-story, 125 x 200 ft. mill construction factory, concrete foundation, on Cortland and Kilbourne Sts., for Natl. Enameling & Stamping Co., 346 West Kinzie St. About $85,000.

Ill., Chicago—Mundie & Jensen, archts., 39 South La Salle St., receiving bids building 3 story, 67 x 194 ft., 2 story, 194 x 414 ft. and 1 story 81 x 108 ft. brick and timber piano factory, rein.-con. flooring and concrete foundation, on Kedzie Ave. and 48th Pl., for Melville Clark Piano Co., 25 East Jackson St. About $400,000.

Mo., Joplin—Until May 1, by C. Lubhoelter, archt., 215 West 9th St., building 3 story, 104 x 120 ft. brick warehouse, concrete foundation on Virginia Ave. between 5th and 6th Sts., for Christmas Dry Goods Co., 501-3 Main St. About $50,000.

Ont., Guelph—Until Apr. 9, by James, Loudon & Hertzberg, engrs., Excelsior Life Bldg., Toronto, building 3 story, 60 x 100 ft., rein.-con. and brick, addition to plant, rein.-con. flooring, concrete foundation, for Patridge Rubber Co., Metcalf St. About $60,000. Noted Mar. 20.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Cambridge** (Boston P. O.)—Boston Confectionery Co. let contract building 5-story, 75 x 80 ft. rein.-con. and steel factory, rein.-con. flooring and concrete foundation, on Main and State Sts. here, to W. M. Bailey Co., 88 Broad St., Boston. About $130,000.

★**Mass., Cambridge** (Boston P. O.)—F. H. Dow Co. let contract building 5-story, 60 x 100 ft. rein.con. and steel factory, rein.-con. flooring and concrete foundation, on Main St., to W. M. Bailey Co., 88 Broad St., Boston. About $150,000.

★**R. I., Providence**—Providence Ice Co., 17 Exch. St., let contract building 2 story, 90 x 135 ft. brick and steel ice plant, to Lord Constr. Co., Fields Point. About $30,000.

★**Conn., Deep River**—Pratt, Read & Co. let contract building 1 story, 60 x 70 ft. machine shop and 2 story, 20 x 40 ft. addition to kiln and stock room, rein.-con., to Ellison Constr. Co., 60 Prospect St., Hartford. About $25,000.

★**N. Y., Brooklyn**—H. Fein, 626 Essex St., will build 1 story, 100 x 150 ft., brick and steel garage, rein.-con. flooring, concrete foundation, on Pitkin Ave. and Hinsdale St. About $40,000. Work will be done by day labor. Noted Mar. 20.

★**N. Y., Brooklyn**—Realty Supply Co., 215 Montague St., will build 1 story, 100 x 125 ft., brick and steel garage, rein-con. flooring, concrete foundation, at 6150 4th Ave. About $35,000. Work will be done by day labor.

★**N. Y., Brooklyn**—M. Robertson, 1623 Pitkin Ave., will build 1 story, 100 x 100 ft., brick and steel garage, rein.-con. flooring, concrete foundation, at 1964 Pitkin Ave. About $35,000. Work will be done by day labor.

★**N. Y., Long Island City**—Genl. Carbonic Co., 444 Van Brunt St., Brooklyn, let contract constructing four 1 story, brick and steel buildings, concrete foundation, on 6th St. and West Ave., to Austin Co., 217 Bway., New York City. About $200,000; cost plus percentage basis.

★**N. Y., New York**—Elder & Wells, 65 9th Ave., let contract building 1 and 2 story, 100 x 120 ft., brick garage and office, rein.-con. flooring, concrete foundation, to G. A. Carpenter, 18 East 41st St. About $55,000.

★**N. Y., New York**—St. Patrick's Cathedral, 24 East 52nd St., let contract building 1 story, 175 x 200 ft. steel and brick garage, rein.-con. flooring, concrete foundation, on 11th St. and 1st Ave., to B. Mieburg, 3120 Bway. About $65,000.

★**N. Y., New York**—Urndmiller Realty Co., c/o Sommerfield & Stickler, archts, 31 Union Sq., will build 2-story, steel and brick warehouse, rein.-con. flooring, concrete foundation, on 10th Ave., 55th and 56th Sts. About $30,000. Work will be done by day labor. 455 West 55th St. Corp., lessee.

★**N. Y., Rochester**—Gleason Wks., 1000 University Ave., let contract building 2 story, 80 x 365 ft., steel and brick addition to factory, to A. Friedrich & Sons Co., 710 Lake Ave. About $75,000.

★**Ala., Birmingham**—Joubert-Goslin Machine & Fdry. Co., 8th Ave., let contract building addition to machine shop, to Ingalls Iron Wks., 802 Ave. D, and C. M. Allen & Son, 114½ North 21st St. About $35,000.

★**La., New Orleans**—New Orleans Petroleum Co., Woolworth Bldg., New York City, will build oil refinery, 15 miles from here. About $1,500,000. Work will be done by day labor.

★**O., Cincinnati**—Globe-Wernicke Co., Norwood St., let contract building 3 story, 75 x 350 ft., brick factory on Montgomery Rd., to Ferro-Concrete Constr. Co., Richmfond and Harriet Sts., $200,000, cost plus percentage basis.

★**O., Cleveland**—Uhl & Jaster Co., 1900 Euclid Bldg., will build 1 and 2 story, 40 x 130 ft., brick, steel and rein.-con. warehouse and office, concrete foundation, at 5003-5 St. Clair Ave. About $50,000. Work will be done by day labor.

★**Mich., Detroit**—Central Forge Co., Euclid Ave., let contract for 2 story, 70 x 302 ft. steel forge shop, rein.-con. flooring, concrete foundation and 2 story, 70 x 302 ft. steel heat treating plant, brick flooring, concrete foundation, on Euclid Ave. and Grand Trunk R. R. tracks, to Whitehead & Kales Iron Wks., Beecher Ave. and Michigan Central R. R. Noted Mar. 20.

★**Mich., Detroit**—Stecker Electric & Machine Co., 34 Bates St., let contract building 3 story, 75 x 250 ft. brick and rein.-con. factory, rein.-con. flooring, concrete foundation, on Dewey and Greenwood Aves., to W. S. Pocock & Co., 515 Hammond Bldg. About $135,000. Noted Mar. 20.

★**Ill., Alton**—Alton Straw & Boxboard Paper Co., will build steel and rein.-con. addition to factory. About $25,000. Work will be done by day labor.

★**Ill., Chicago**—I. Blum, 919 Fulton St., let contract building 3 story, 50 x 118 ft. brick and rein.-con. meat products plant, rein.-con. flooring, concrete foundation, at 942 Fulton St., to J. Grosser, c/o G. H. Grussing, archt., 154 West Randolph St. About $80,000.

Ia., Oelwein—Oelwein Auto Co. let contract building 2 story, 75 x 140 ft., rein.-con. and brick garage, to T. Stark & Co., 118 South 11th St., W., Cedar Rapids. About $45,000.

Neb., Omaha—See "Buildings."

★**Neb., Omaha**—Higgins Packing Co., 1315 Woodmen of World Bldg., let contract building 1st unit of cold storage plant, 4 story, 50 x 100 ft., brick, on 36th and L Sts., to J. Hansen, 803 Ave. F., Council Bluffs, Ia., $70,000.

★**Ark., Little Rock**—Dixie Cotton Oil Co., East of North Little Rock, will build 2 story, 60 x 240 ft. rein.-con. mill, rein.-con. flooring, concrete foundation, along Rock Island R.R. tracks, east of city. About $75,000. Work will be done by day labor.

★**Que., Montreal**—La Parisienne Shoe Co., 614 La Salle Ave., let contract building 4 story, 50 x 60 ft. concrete, steel and brick factory on La Salle Ave., to A. Mercure, 419 Labroque St. About $60,000.

Buildings

PROPOSED WORK

Mass., Holyoke—Church—Second Congregational Church Society, plans to rebuild church on Hampden St. recently destroyed by fire. Loss, $325,000. Address Bd. Trustees, Holyoke.

Mass., Roxbury (Boston P. O.)—Store and Office—G. Kimball having plans prepared by A. J. Carpenter, Jr., archt., 39 Dunreath St., for 1 story, 112 x 160 ft. brick and concrete on Washington St. About $50,000.

R. I., Providence—Home—Polish Society, 408 Hartford Ave., plans to build home. About $50,000. Address A. Czubak.

Conn., Bridgeport — Church — Trinity Methodist Episcopal Society, Remer St. and North Ave., plans to build church on North Main St. above St. Vincent's Hospital. Cost between $50,000 and $60,000.

Conn., Bridgeport—School—A Figlewski, pastor, St. Michaels Polish congregation, 310 Sterling St., soon receives bids for 3½-story, 90 x 150 ft. brick, steel and concrete, rein.-con. flooring, concrete foundation, on Sterling and Kossuth Sts. About $160,000. Noted Mar. 13.

Conn., Waterbury—Fire Station—City soon receives bids building 2-story, 37 x 58 ft. brick, rein.-con. flooring and concrete foundation, on Bunker Hill Ave. About $50,000. J. T. Smith, 36 North Main St., archt. Noted Feb. 20.

Buildings (Continued)

Conn., Waterbury—Fire and Police Station—City soon receives bids building 2-story, 35 x 38 ft. and 16 x 40 ft. brick, rein.-con. flooring, concrete foundation, on Thomaston Ave. About $50,000. J. T. Smith, 36 North Main St., archt. Noted Feb. 20.

Conn., West Hartford (Hartford P. O.)—Hotel—B. A. Jellew, archt., 756 Main St., receives bids about Apr. 14, building 3 story, 65 x 82 ft. brick, concrete foundation on Main St. and Farmington Ave., for Allen & Judd, 170 Sargent St. About $65,000.

N. Y., Binghamton—Theater—Majestic Real Estate Co. having plans prepared for theater. About $250,000. Address J. G. Brownlow, 66 Chenango St.

N. Y., New York—Bank—Italian Savings Bank, Cleveland Pl. and Spring St., soon receives bids building 10 story, 100 x 150 ft., brick and steel, concrete foundation. About $150,000. C. P. H. Gilbert, 1123 Bway, archt.

N. Y., New York—Store and Lofts—Langdon Co., Inc., 85 Liberty St., having plans prepared by Maynicks & Franke, archts., 25 East 26th St., for 15 story, 50 x 85 ft., brick and steel, concrete foundation, at 119 West 41st St. About $600,000.

N. Y., New York—Hotel—Mason Realty Corp., 418 Central Park, W., having plans prepared by Zipkes, Wolf & Kudroff, archts., 25 West 42nd St., for 1 story, brick and stone addition to hotel. About $100,000.

N. Y., New York—Club—77th Div. Assn., 280 Madison Ave., having preliminary sketches prepared by Warren & Wetmore, archts., 10 East 47th St., for 100 x 200 ft., brick and steel, concrete foundation on Lafayette and 8th Sts. About $5,000,000.

N. Y., Saratoga—Community House—Redemptorist Fathers of St. Clements College, Lake Ave., soon eceive bids building 3 story, rein.-con. and brick. About $500,000.

N. J., Harrison—School—Bd. Educ. having tentative plans prepared by J. B. Baker, archt., 111 North 4th St., building 175 x 175 x 200 ft., concrete brick and steel school on 3rd and Harrison Sts., rein.-con. flooring, concrete foundation, to include auditorium, gymnasium and playgrounds. About $275,000.

N. J., Jersey City—Store and Office—Schulte Cigar Stores Co., 386 Bway., New York City, has leased 100 x 125 ft. plot at Summit Tube Station entrance here and plans to build 2 story. About $50,000.

N. J., Jersey City—Theater—Natl. Theater Co., 433 Central Ave., plans to build 95 x 155 ft., terra-cotta, limestone and pressed brick, on Central Ave. and Sherman Pl. About $75,000.

Mich., Adrian—Gymnasium, etc.—Industrial Home for Girls plans to build gymnasium, cost $50,000; laundry and equipment, $25,000; install new plumbing and shower baths, $14,000.

O., Cleveland—Office—See "Industrial Works."

Ill., Chicago—Office—Old Colony Life Insurance Co., 2721 South Michigan Ave., had plans prepared by C. A. Eckstrom, archt., 5 North La Salle St., for 16 story, 50 x 165 ft. fireproof building, on Jackson Blvd. and La Salle St. About $1,000,000.

Ill., Lincoln—Cottages—E. D. Martin, archt., Capitol Bldg., Springfield, soon receives bids building three 1 and 2-story, 50 x 100 ft. brick and tile cottages at Lincoln State School and College. About $65,000.

Ill., Quincy—Hotel—Royal Hotel Co., 513 Hampshire St., plans to build 7 or 8-story annex to Hotel Quincy. About $100,000. C. H. Achelpohl, mgr.

Ill., Springfield—Theater and Office—Springfield Realty & Impvt. Co. having preliminary plans prepared for 5 story, 150 x 165 ft. fireproof building. About $350,000.

Ill., Streator—Store and Office—D. C. Murray, 309 East Main St., soon lets contract building 5-story, 50 x 142 ft. brick and rein.-con., concrete foundation. About $175,000. G. C. Nimmons & Co., 120 South Michigan Ave., Chicago, archts. Noted Feb. 6.

Ia., Cedar Rapids—School—Bd. Educ. plans to build brick and stone school. About $50,000. J. A. Motejl, 219 Cedar Rapids Natl. Bank Bldg., secy.

Ia., Iowa City—School—Roman Catholic congregation, c/o J. O'Leary, chn. bldg. com., 1110 East Court St., plans to build here. About $100,000.

Minn., Ely—Hotel—Ely Hotel Co. plans to build 3 story, brick, rein.-con. flooring, concrete foundation. About $75,000. M. J. Murphy, 1st State Bank Bldg., chn. of com.

Minn., Minneapolis—Excharge and Office—Northwestern Telephone Exch. Co., 224 South 5th St., having plans prepared by Hewitt & Brown, archts., 716 4th Ave., S., for 11 story, 157 x 132 ft., brick and steel, rein.-con. flooring, brick foundation on 3rd Ave. S. and 5th St. About $1,000,000.

Minn., Minneapolis—Office—D. C. Bell Investment Co., 226 Security Bldg., plans to build, on 2nd Ave., S., and 6th St. About $1,500,000.

Minn., Minneapolis—Theater—Mill City Investment Co. plans to build 3 story, 110 x 127 ft., brick and terra cotta theater and hall on Lake St. near Nicollet St. About $100,000. D. C. Swain, Plymouth Bldg., archt.

Minn., Pipestone—Theater—Hines Theater Co. plans to build 2 story, 50 x 150 ft., brick and timber, brick foundation. About $50,000.

Minn., St. Paul—Hotel—Minor Hotel Co., Magee Hotel, plans to build 16 story on 9th and Robert Sts. About $500,000. M. Fitzpatrick, 17 West 9th St., archt.

Kan., Topeka—Dormitory, etc.—Washburn College, 17th and College Sts., receives bids about July 1, building 3 story, 75 x 150 ft. rein.-con. and steel dormitory and social center. About $125,000. R. E. Scamell, Topeka, archt.

Neb., Collegeview—School—City voted $60,000 bonds to build school.

Neb., Omaha—Club House—Knights of Columbus, 2025 Dodge St., plan to build brick club house, to include auditorium, swimming pool, etc. About $200,000.

N. D., Grand Forks—Hall—Salvation Army plans to build 3 story, 35 x 80 ft. brick and stone on De Mers Ave.

Wyo., Laramie—Court House and Jail Albany Co. election Apr. 22, to vote on $200,000 bonds to purchase site, build and equip court house and jail.

Mont., Great Falls—School—Bd. Educ., School Dist. 1, receives bids in fall for grade school. About $160,000. Bird & Van Teylingen, Great Falls, archts.

Mo., Joplin—Theater—Ideal Theater Co., 528 Main St., plans to build 3 story, 100 x 120 ft. brick, rein.-con. flooring, concrete foundation on 6th and Main Sts. About $50,000.

Mo., St. Louis—Bank—Third Natl. Bank, Bway. and Olive St., receives bids about May 1, building 2 story, 41 x 127 ft. brick, rein.-con. and steel annex, rein.-con. flooring, concrete foundation. About $100,000. G. F. A. Brueggman, 902 Third Natl. Bank Bldg., archt. Noted Jan. 16.

Mo., St. Louis—Theater—H. and W. Scherrer, 5955 Easton Ave., receive bids in summer building 2 story, 150 x 225 ft. at 5586 Easton Ave. About $200,000.

Tex., Houston—Schools—City election May 25 to vote on $500,000 bonds to build high school and $300,000 for ward school.

Okla., Elk City—High School—Bd. Educ. having plans prepared by Hawk & Parr, archts., Security Bldg., Oklahoma, building 2 story, brick and stone. About $125,000.

Okla., Muskogee—Exhibit—State Legislature, Oklahoma, appropriated $50,000 to construct Indian and Agricultural exhibit building at fair grounds, here.

Okla., Muskogee—School—City voted $400,000 bonds to build schools.

Okla., Oklahoma—Schools—City voted $1,000,000 bonds to build schools.

Okla., Okmulgee—High School—Bd. Educ. having plans prepared by Smith, Rea, Lovitt & Senter, archts., Parkinson Bldg., for rein.-con. and brick. About $200,000.

Okla., Okmulgee—Theater—J. Feeney having plans prepared by Smith, Rea, Lovitt & Senter, archts., Parkinson Bldg., for 1 story, 50 x 140 ft., rein.-con. and brick. About $75,000.

Idaho, Payette—School—City election Apr. 12, to vote on $75,000 bonds to build high school in Dist. 32. E. B. Holmes, clk.

Utah, Ogden—Schools—City plans election soon to vote on $500,000 bonds to build high and grade schools.

Utah, Richmond—High School—Comrs. Cache Co. having plans prepared by L. Hodgson, archt., Commercial Bldg., Logan, for high school. About $75,000.

Ariz., Chandler—School—School Trustees plan to build school. Bonds for $125,000 voted for project.

Ariz., Morenci—School—School Trustees having plans prepared by C. L. Wilson, archts., Monrovia, Cal., for 2 story, rein.-con., rein.-con. flooring, concrete foundation here. Address Capt. J. P. Hodgson. Noted Mar. 20.

Ariz., Tucson—Courthouse—Bd. Supervs. Pima Co. having plans prepared by W. Curlett & Son, archts., 518 Merchants Natl. Bank Bldg., Los Angeles, building rein.-con. courthouse, concrete foundation. About $500,000. Bonds will be voted for project.

Ariz., Tucson—Store, etc.—Congress Realty Co. having plans prepared by W. Curlett & Son, archts., 518 Merchants Natl. Bank Bldg., Los Angeles, Cal., for 2 story, concrete and brick store, theater and office, rein.-con. flooring, concrete foundation. About $50,000.

Wash., Vancouver—High School—City plans to sell $75,000 bonds to build addition to high school.

Ore., Salem—Dormitory, etc.—R. B. Goodin, secy. state bd. control, Capitol Bldg., soon lets contract building brick hospital dormitory and boys' dormitory at State Institution for Feeble Minded. Noted Mar. 20.

Cal., Anaheim—Church—First Methodist Episcopal congregation having plans prepared by N. F. Marsh, archt., 211 Bway, Central Bldg., Los Angeles, building 2-story, 80 x 120 ft., frame and plaster, concrete foundation. About $50,000.

Cal., San Francisco—Hotel and Office—Salvation Army, 417 Market St., having plans prepared by G. W. Kelham, archt., Sharon Bldg., for 6 story. About $250,000.

Cal., Santa Barbara—Resort—G. Proctor, pres. Granite Springs Water Co., Granite Springs, N. Y., plans to build resort. Plans include bath house, swimming pools, beach features, 100 houses, building sewers, streets, etc., in Montecito Sect. Cost between $75,000 and $125,000.

N. B., Moncton—Schools—School Bd. receives bids about May 1 building 3 story school. About $150,000. F. N. Brodie, 42 Princess St., St. John, archt. Noted Feb. 27.

Que., Montreal—Exchange—Bell Telephone Co., 118 Notre Dame St., W., having plans prepared by J. W. Carmichael, archt., 29 Hospital St., for telephone exchange. Cost to exceed $300,000.

Ont., Gravenhurst—Sanitorium—Calydou Sanitorium plans to build 4 story, steel and brick. About $75,000.

Ont., Humberstone—School—School Bd. plans to build 50 x 100 ft., steel and brick. About $50,000. W. Kinsley, Humberstone, engr.

Ont., St. Catharines—Schools—School Bd. receives competitive plans until Apr. 15 building two 1 story schools. About $75,000 each. C. T. McBride, secy. treas.

Ont., Toronto—Office—Dominion Bank, Dominion Bank Bldg., had plans prepared by Darling & Pearson, archts., 2 Leader Lane, building 2 story, steel and brick, rein.-con. flooring, on Yonge St. About $250,000.

Alta., Medicine Hat—Business Block—H. L. Tweed, Tweed Block, soon receives bids building 3 story, 60 x 100 ft., brick. About $50,000.

Alta., Medicine Hat—Court House—Dept. Pub. Wks., Edmonton, had plans prepared by R. Blakey, archt., Parliment Bldg., Edmonton, building brick court house here. About $150,000.

Alta., Red Deer—Theater—F. N. Smith having plans prepared by C. A. J. Sherman, archt., Red Deer, building 50 x 130 ft., brick and stone, concrete foundation, on Gaete Ave., S. About $50,000.

B. C., Vancouver—Bank and Office—Somerville & Putman, archts., London Bldg., receive bids in about 6 weeks, building 3 story, 48 x 95 ft., stone, on Hastings and Seymour Sts., for Union Bank. About $250,000. Noted Mar. 20.

BIDS DESIRED

N. Y., Cobleskill—School—Until Apr. 11, by D. D. Frisbie, pres. bd. trustees, Schoharie State School of Agriculture, at office of Comrs. of Agriculture, State and Lodge Sts., Albany, building 2 story, 40 x 70 ft., concrete and brick, rein.-con. flooring, concrete foundation. About $50,000.

Ill., Forest Park (Oak Park P. O.)—Theatre and Stores—H. L. Newhouse, archt., 4630 Prairie Ave., Chicago, is receiving bids for 1 story, 120 x 200 ft. brick and timber, brick foundation, on Madison and Des Plaines Sts., here, for A. Harris, 35th and Iron Sts., Chicago. About $85,000. Noted Mar. 13.

Buildings (Continued)

Minn., Brainerd—Courthouse—Until June 3 (change of date) by Comrs. Crow Wing Co., building 90 x 125 ft., rein.-con., rein.-con. flooring, concrete foundation. About $275,000. Alden & Harris, 1011 New York Life Bldg., St. Paul, archts. Noted Mar. 27.

N. D., Grand Forks—Theater—Until Apr. 10 by A. J. Kavanaugh, building 3 story brick at 413-15 De Mers Ave. About $100,000. Buechner & Orth, Minneapolis, Minn., archts. Noted Feb. 27.

Mont., Hardin—High School—Until Apr. 7, by Bd. Educ. building high school in Dist. No. 17. About $100,000. Dedrick & Bebbe, Billings, archts.

Mo., St. Louis—Bank—Until May 1, by G. Brueggeman, archt., 902 3rd Natl. Bank Bldg., building 4 story, 71 x 127 ft. brick, rein.-con. and steel, rein.-con. flooring, concrete foundation, at 205-207 North Bway., for 3rd Natl. Bank, Bway. and Olive Sts. About $200,000. Noted Jan. 16.

Cal., Quincy—Court House and Jail—Until Apr. 22 (change of date), by Bd. Supervs. Plumas Co., building 4 story, 60 x 120 ft. rein.-con., rein.-con. flooring, concrete foundation. G. A. Sellon, Mitau Bldg., Sacramento, archt. Noted Feb. 20.

Que., Montreal—Office—Until Apr. 7, by Ross & MacDonald, archts., 1 Belmont St., building 2 story, 47 x 80 ft., steel and brick, concrete foundation, on Mill St., for W. Davies Co., Ltd., Mill St. About $50,000.

Ont., Brantford—School—Until Apr. 11 by A. K. Bunnell, secy.-treas., building 12 room school on Rawdon St., for School Bd. W. C. Tilley, 11 Temple Bldg., archt. Noted Feb. 27.

Ont., Waterdown—School—Until Apr. 25, by J. A. Ames, archt., 183 Bold St., Hamilton, building 2 story, concrete, steel and brick, rein.-con. flooring, for School Bd. About $55,000.

PRICES AND CONTRACTS AWARDED

(★Indicates Award of Contract)

★**R. I., Providence**—Theater—J. Bartley, Seekonk, Mass., let contract altering Scenic Theater on Mathewson St. and building 32 x 72 ft. and 20 x 30 ft. brick, steel and concrete addition, to T. Coffey, 15 Ivy St. About $50,000. Noted Mar. 20.

★**Conn., Hartford**—Hotel—C. J. Burgess, 64 Brownell Ave., will build 3 story, 89 x 114 ft. brick and timber, with 89 x 125 ft. wing, concrete foundation, on Washington St. About $150,000. Work will be done by day labor.

★**Conn., Hartford**—Office—Amer. Industrial Bank & Trust Co., 688 Main St. let contract building 15 story, 56 x 156 ft. brick and steel, concrete foundation on Main St., to Godly, Haskel & Ledwich, 244 Madison Ave., New York City. About $600,000.

★**Conn., Wallingford** — Home — Masonic Charity Foundation of Conn., Masonic Ave., let contract building 4 story, 86 x 105 ft. with 38 x 46 ft. wings, steel and rein-con., rein-con. flooring, concrete foundation, to H. Wales Lines Co., 134 State St., Meriden. About $100,000. Noted Aug. 22, 1918.

N. Y., Bath—Barracks—Bd. Dirs. Soldiers & Sailors Home, received bids Mar. 25, building 2 story, 44 x 151 ft., with rear wing, 44 x 75 ft., rein.-con., brick and steel, rein.-con. flooring, brick foundation, at State Institution, from T. H. McHale & Son, Cahill Bldg., Syracuse, $71,500; H. P. Sickels Co., 840 University Ave., Rochester, $72,000; Pulford & Dempsey Constr. Co., South Main St., Elmira, $74,770. Noted Feb. 27.

★**N. Y., Brooklyn**—Hospital—Brooklyn Maternity Hospital, 670 Bushwick Ave., will build 4 story, 75 x 100 ft., brick and steel, concrete foundation, on Bushwick Ave. and Cedar St. About $70,000. Work will be done by day labor. M. Duckman, treas. Noted Mar. 13.

★**N. Y., Brooklyn**—Schools—Bd. Educ., 500 Park Ave., New York City, let contract building P. S. 20, 5 story, 92 x 195 ft., brick and steel, concrete foundation, on Roebling St., North 4th and North 5th Sts., and P. S. 182, 5 story, 118 x 192 ft., brick and steel, concrete foundation, on Dumont and Wyona Aves., to P. J. Brennan, 624 Madison Ave., $481,650 and $464,340 respectively. Noted Mar. 20.

N. Y., Buffalo—School—Bd. Educ. received bids building P. S. No. 8, general construction, from Mosier & Summers, 1266 Seneca St., $216,000; heating and ventilating, from H. J. Wood & Co., Buffalo, $50,949; plumbing, from Chippewa Plumbing Co., 88 West Chippewa St., $17,300.

★**N. Y., New York**—Office—See "Industrial Works."

★**N. Y., New York**—Office—R. B. Diela, 527 5th Ave., let contract building 1 story, steel and brick addition, concrete foundation, to Wharton Green, 37 West 39th St. About $60,000.

★**N. Y., New York**—Office—New York Stock Exch., New St., let contract altering and enlarging interior, brick and timber, to M. Eidlitz, 30 East 42nd St. About $75,000.

Md., Baltimore—Store—The Hub, Baltimore and Charles Sts., received bids building 2 story, 40 x 85 ft., steel, brick and concrete addition and altering store front, from Cogswell, Koether & Co., 406 Park Ave.; J. Hiltz & Sons, 3 Clay St.; C. L. Stockhausen Co., Gay and Water Sts., Frainie Bros. & Hengley, 18 Clay St. Total cost, $50,000.

Md., Towson—Orphan Asylum—St. Vincent's Male Orphan Asylum, York Rd., received lowest bid altering existing buildings and constructing 2½ story, 40 x 100 ft., dormitory and 1 story, 40 x 50 ft. boiler house, brick and steel, from J. J. O'Connor, 52 Knickerbocker Bldg., Baltimore, $50,000. Noted Mar. 6.

O., Cleveland—"See Industrial Work."

★**O., Cleveland**—Bath House, etc.—Bd. Pub. Serv., City Hall, let contract building 2 story, brick, steel and concrete bathhouse and swimming pool, at Brookside Park, to G. A. Rutherford Co., 1922 East 18th St. About $50,000.

★**O., Cleveland**—Office, etc.—W. Dunbar Co., 8201 Cedar Ave., will build 2 story, 20 x 24 x 113 ft. brick, steel and concrete office and workshop, concrete foundation. About $50,000. Work to be done by day labor.

★**Mich., Detroit** — Mercantile — Heyn's Bazaar, 147 Woodward Ave., let contract building 8-story, 40 x 100 ft. brick, rein.-con. and steel, rein.-con. flooring and concrete foundation, to H. G. Christman Co., 315 Stevens Bldg. About $250,000. Noted Mar. 13.

★**Mich., Detroit**—Store and Office—J. R. Thompson Co., 350 North Clark St., Chicago, let contract building 4-story, 40 x 100 ft. brick and steel, concrete foundation, at 146 Woodward Ave., here, to Krahl Constr. Co., 350 North Clark St., Chicago. About $95,000.

Ill., Chicago—School—Bd. Educ. received bids altering existing building and constructing 3 story, 105 x 120 ft. brick and timber addition to Darwin School, rein.-con. flooring as follows: concrete foundation, on Edgewood and North Albany Aves., masonry from J. Buenkirchen, $44,658; A. and E. Anderson Co., 19 South La Salle St., $44,821; J. L. Connelly, 130 West Washington St., $45,330; structural steel, from South Halsted Iron Wks., 1233 West Rand St., $24,447; Wendnagel Co., 600 West 22nd St., $24,990; Frandsen Constr. Co., 64 West Rand St., $25,108; carpentry, from H. Schrik & Co., 3722 West Chicago Ave., $15,399; G. Reininga, $15,848; F. Voss, $16,200; fireproofing, from A. W. Egan, $15,968; Natl. Fireproofing Co., 2600 Shields Ave., $16,778; W. E. Hughes & Co., 133 West Washington St., $17,500. Noted Mar. 13.

★**Ill., Chicago**—School—Bd. Educ. let contract building two 3-story, 39 x 62 ft. and 47 x 90 ft. brick and steel addition to Davis School on West 39th St. and South Sacramento Blvd., as follows: Masonry, to F. A. Siebold & Son, 133 West Washington St., $59,980; terra cotta, to Northwestern Terra Cotta Co., 175 West Jackson Blvd., $30,590; structural steel, to W. Horn Structural Iron Wks., 336 North Leavitt St., $25,870; carpentry, to F. Voss, $20,985. Noted Mar. 6.

★**Wis., Niagara**—School—Bd. Educ. let contract building addition to school, to D. Hubert, Menomonie. About $85,000.

★**Minn., Bovey**—School—Bd. Educ., Coleraine, let contract building 2 story, 120 x 216 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, here, to Evenson & Utterberg, Builders' Exch., Minneapolis, $134,890.

★**Neb., Omaha**—Salesroom, etc.—Western Motor Car Co., 2047 Farnum St., let contract building 6 story, 132 x 136 ft., steel and concrete salesroom and warehouse, on Farnum St., between 30th and 31st Sts., to G. W. Stiles Constr. Co., Lumber Exch. Bldg., Chicago, $335,000.

★**Mo., Joplin**—Y. M. C. A., Calumet Bldg., let contract for 5 story, 103 x 129 ft. brick, steel and rein-con. building, rein.-con. flooring, concrete foundation on 5th Ave. and Wall St., to Eberhardt Constr. Co., Salina, Kan., $169,600. Noted Mar. 27.

★**Tex., Ft. Worth**—Office—W. T. Waggoner Nat'l. Bank Bldg., let contract building 20-story, 75 x 75 ft., rein.-con., brick and steel, rein.-con. flooring, concrete foundation, on 8th and Houston Sts., to C. S. Lambie Co., 312 Tramway Bldg., Denver, Colo. Noted Feb. 27.

★**Okla., Drumright**—High School—Bd. Educ. let contract building 1 story, brick and stone, to A. F. Stewart Constr. Co., 2230 West 16th St., Oklahoma, $209,760. Noted Feb. 13.

★**Okla., Oklahoma**—Arts—Oklahoma State Fair Assn. let contract constructing 1-story, 200 x 200 ft. liberal arts building, at state fair grounds, to Gross Constr. Co., 132½ West 2nd St. About $90,000.

★**Colo., Center**—School—Bd. Educ. let contract building 2 story, 60 x 275 ft., brick and concrete, rein.-con. flooring, concrete foundation, to J. J. Cooke, Advance Constr. Co., 1601 East 25th Ave., Denver, $71,875. Noted Feb. 27.

★**Ore., Portland**—Apartment Hotel—Universal Orchard Co., Pittock Blk., let contract building 4-story, 100 x 100 ft. brick, on 3rd and Montgomery Sts., to Bingham & McClelland, Pittock Blk. About $125,000.

Federal Government Work

PROPOSED WORK

Me., Caribou—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 6, same being in excess of appropriation. Noted Jan. 9.

Me., Ft. Fairfield—Post Office and Custom House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 13, same being in excess of appropriation. Noted Jan. 16.

Mass., Newburyport—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 3, same being in excess of appropriation. Noted Jan. 9.

Mass., Southbridge—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected bids received Jan. 14, same being in excess of appropriation. Noted Jan. 23.

Mass., Winchester—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 16, same being in excess of appropriation. Noted Jan. 23.

R. I., Newport—Emergency Hospital—Bureau Yards & Docks, Navy Dept., Wash., D. C., postponed project indefinitely; Spec. 3750. Noted Feb. 13.

N. Y., Cohoes—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 17, same being in excess of appropriation. Noted Jan. 23.

N. Y., Ward's Island—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3849. About $20,000.

N. Y., Waterloo—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 8, same being in excess of appropriation. Noted Jan. 16.

N. J., Vineland—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 10, same being in excess of appropriation. Noted Jan. 16.

N. J., Woodbury—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 7, same being in excess of appropriation. Noted Jan. 16.

Pa., Ft. Mifflin—Fence—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build; Spec. 3848. About $16,000.

Pa., Franklin—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 17, same being in excess of appropriation. Noted Jan. 23.

Federal Government Work (Continued)

Pa., McKees Rocks—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 14, same being in excess of appropriation. Noted Jan. 23.

Pa., Phila.—Marine Railway—U. S. Eng. Office, 815 Witherspoon Bldg., soon receives bids building 192 ft. marine railway, 52 ft. wide, on Delaware River.

Pa., State College—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 9, same being in excess of appropriation. Noted Jan. 16.

Md., Indianhead—Roads—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build county roads; Spec. 3850. About $67,500.

Va., Front Royal—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 10, same being in excess of appropriation. Noted Jan. 16.

Va., Hampton Roads—Medical Storage Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., postponed project indefinitely; Spec. 3462. Noted Sept. 26.

Va., Lorton — Institution Buildings — Dist. Comrs., Dist. Bldg., Wash., D. C., plan to build thirty-one 1 story brick buildings, concrete floors, ranging in size from 25 x 125 ft. to 40 x 125 ft. Materials used as far as possible will be those manufactured by inmates of institution on reservation.

W. Va., Charleston—Roof—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build at ordnance plant; Spec. 3840. About $47,300.

W. Va., Charleston—Roof Decks—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build gypsum roof decks at naval ordnance plant; Spec. 3839. About $169,000.

S. C., Charleston—Storehouse—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to build fixed ammunition storehouse; Spec. 3842. About $52,000.

S. C., Lancaster—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 6, same being in excess of appropriation. Noted Jan. 9.

Fla., Key West—Oil Burning Equipment—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to purchase oil burning equipment for boiler; Spec. 3847. About $6500.

O., Kenton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 15, same being in excess of appropriation. Noted Jan. 23.

Ill., Mt. Carmel—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 3, same being in excess of appropriation. Noted Jan. 9.

Ia., Cherokee—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 14, same being in excess of appropriation. Noted Jan. 23.

S. D., Bellefourche—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 15, same being in excess of appropriation. Noted Jan. 23

Wyo., Buffalo—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 17, same being in excess of appropriation. Noted Dec. 5.

Wyo., Cody—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 8, same being in excess of appropriation. Noted Jan. 16.

Mo., Harrisonville—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 20, same being in excess of appropriation. Noted Jan. 23.

Ark., Prescott—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 8, same being in excess of appropriation. Noted Jan. 16.

Tex., North Ft. Worth — Wells and Pumps—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected all bids received Feb. 24, installing here; Spec. 3577. Noted Feb. 27.

Tex., Orange—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected bids received Jan. 9, same being in excess of appropriation. Noted Jan. 16.

Okla., Shawnee—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 16, same being in excess of appropriation. Noted Jan. 23.

Utah, Park City—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 3, same being in excess of appropriation. Noted Jan. 9.

Ariz., Globe—Post Office and Court House J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 13, same being in excess of appropriation. Noted Jan. 16.

Wash., Puget Sound (Bremerton P. O.)—Reciprocating Air Compressor — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to install here; Spec. 3837. About $62,000.

Ore., Portland—Road Work—L. I. Hewes, dist. engr., bureau pub. rds., U. S. Dept. of Agriculture, 628 Post Office Bldg., soon receives bids building and improving Sect. 2, Canyonville-Galesville Natl. Forest Rd. in Umpqua Natl. Forest, Douglas Co. Work involves 60,000 cu.yd. excav., 10 pipe or concrete culverts, 2 acres clearing and grubbing and 4000 lin.ft. guard rail.

Cal., Bakersfield—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., rejected all bids received Jan. 6, same being in excess of appropriation. Noted Jan. 30.

Cal., Mare Island—Structural Shop—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected all bids building structural shop; Spec. 3691. Noted Mar. 13.

BIDS DESIRED

N. H., Portsmouth—Building Addition—Until **Apr. 14**, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building addition to building No. 42 for spar shop; Spec. 3799. About $72,000; $10 deposit required for plans and spec.

Mass., Boston—Wharf—Until May 1, by Light House Supt., rebuilding wharf at light house depot, Woods Hole.

Mass., Chatham—Septic Tank, etc.—Until Apr. 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., building septic tank, sewage disposal system, and grading streets; Spec. 3841. About $75,000.

R. I., Providence—Remodeling Post Office—Until Apr. 8, (change of date) by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., remodeling post office. Noted Feb. 27.

N. Y., Buffalo—Drilling Plant, etc.—Until Apr. 16, by U. S Eng. Office, Buffalo, hiring a rock drilling plant and dredging in Buffalo River Entrance Channel, Buffalo Harbor; advertised in this issue.

N. Y., New York—Dredging—Until Apr. 29, by U. S. Eng. Office, 601 Army Bldg., New York City., dredging in Woodbridge Creek, Raritan Bay and Keyport Harbor; advertised in this issue.

N. Y., New York—Dredging—Until Apr. 28, by U. S. Eng. Office, 601 Army Bldg., New York City, dredging in Staten Island Sound, New York and New Jersey; advertised in this issue.

N. Y., Wards Island—Electric Conduit and Switchboard—Until Apr. 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., installing here; Spec. 3819. About $7500. Noted Feb. 27.

N. Y., West Point—Officers' Quarters—Until Apr. 28, by Quartermaster, West Point, building quarters for 8 married officers; advertised in this issue.

Pa., Erie—Post Office and Court House—Until Apr. 21, by J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., for alterations here; advertised in this issue.

Pa., Phila.—Gasoline Supply System—Until **Apr. 14**, by Bureau Yards & Docks, Navy Dept., Wash., D. C.; Spec. 3734. About $12,000; $10 deposit required for plans and spec. Noted Mar. 20.

Wash., D. C.—Sewage Disposal System—Until Apr. 21, by Dist. Comrs., Dist. Bldg., Wash., building substructure for Rock Creek Pumping Sta.

Fla., Jacksonville—Dredging—Until May 3, by U. S. Eng. Office, Jacksonville, dredging in Miami Harbor (Biscayne Bay); advertised in this issue.

Tenn., Memphis—Towboat—Until Apr. 25, by Mississippi River Comn., 1st and 2nd Dists., Custom House, Memphis, furnishing stern wheel steel towboat; advertised in this issue.

O., Lorain—Paving—Until Apr. 17, by R. W. Pratt, 814 Hippodrome Bldg., Cleveland, local project engr. for U. S. Shipping Bd., Emergency Fleet Corp., for 27,000 sq.yd. concrete paving; advertised in this issue.

Mo., St. Louis—Levee Work—Until Apr. 30, by Secy. Mississippi River Comn., 1211 International Life Bldg., for 200,000 cu.yd. earth work by hydraulic method in Muscatine-Louisa Island Levee Dist., Ia.; advertised in this issue.

Tex., Galveston—Soil and Sod—Until Apr. 23, by U. S. Eng. Office, Galveston, furnishing and placing soil and sod at U. S. Reservation, Ft. Crockett; advertised in this issue.

Cal., Mare Island—Steel—Until Apr. 7, by Bureau Yards & Docks, Navy Dept., furnishing steel for structural shop; Spec. 3838. About $700,000.

Cal., Sacramento—Dredging—Until Apr. 12, by U. S. Eng. Office, 405 Custom House, San Francisco, dredging Sacramento, San Joaquin, Feather and Mokelume Rivers, McLeod Lake, Mormon Channel, etc. Work involves over 600,000 cu.yd. floating dredge work in Sacramento River near here.

Cal., San Francisco — Dredging—Until Apr. 24, by U. S. Eng. Office, 401 Custom House, dredging in Oakland Harbor.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract.)

★**Mass., Boston** — Cranes — Bureau of Yards & Docks, Navy Dept., Wash., D. C., let contract installing 10 electric traveling cranes in steel stock storage shed, to Bedford Fdry. & Machine Co., 1107 5th St., Bedford, Ind.; $8890 (120 days). Noted Mar. 13.

R. I., Newport — Boathouse — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 31, building boathouse at Naval Torpedo Sta.,

(1) net price and time for work, complete, in accordance with drawings and specification, based on using granite for entire depth of foundations;

(2) net price and time to be added to or deducted from (1) if foundations be constructed of concrete in lieu of granite, as specified in alternative (1);

(3) net price and time to be deducted from (1) if all work specified under head of "Crane" be omitted entirely, from

Harris Structural Steel Co., 1480 Bway., New York City, (1) $99,000, (48 days); (2) deduct $5000; (3) deduct $9700.

C. Meades & Co., 38 Park Row, New York City, $113,200 (time as specified, for work complete).

Hyde & Baxter, 711 13th St., N. W., Wash., D. C., (1) $128,841 (150 days; (2) deduct $14,000; (3) deduct $11,000.

Niles-Bement-Pond Co., 111 Bway, New York City, $9800 (120 days), for cranes only. Noted Mar. 20.

R. I., Newport—Quay, Wall, etc.—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 31, building concrete quay wall and fill at Naval Training Sta.,

(1) net price and time for entire work complete in accordance with drawings and specifications;

(2) net price to be added to or deducted from (1) for each linear foot of pile in excess of or less than 50 ft. under section "C-C" of wall;

(3) net price to be added to or deducted from (1) for each linear foot of pile in excess of or less than 20 ft. under section "D-D" of wall;

(4) net price to be added to (1) for each test pile driven

(5) net price to be deducted from (1) for each test used in finished structure, from Hyde & Baxter, 711 13th St., N. W., Wash., D. C., (1) $105,329 (150 days), (2) add $0.65, deduct $0.30; (3) add $0.60, deduct $0.30; (4) add $0.60, deduct $0.15. W. L. Miller & Co., 171 Alfred St., Boston, Mass., (1) $137,943 (140 days); (2) $0.30, (3) $0.20, (4) $35, (5) $12. Raymond Concrete Pile Co., 140 Cedar St., New York City, (1) $139,000 (150 days); (2) add $0.60, deduct $0.05; (3) add $60, deduct $0.05; (4) $100, (5) $15; alternate under (1) $129,000 (150 days). Noted Mar. 20.

R. I., Newport—Water Tank—Bureau Yards & Docks, Navy Dept., Wash., D. C., received Bids Mar. 24, erecting one 2,300,000 gal. steel water tank at Naval Training Sta. (work complete) from Pittsburg Des Moines Steel Co., 959 Munsey Bldg., Wash., D. C., $11,760 (45 days); Mansfield & Savage, 135 William St., New York City, $17,752 (45 days); C. Meades & Co., 38 Park Row, New York City, $18,230 (45 days). Noted Mar. 20.

Federal Government Work (Continued)

N. Y., Albany—Post Office and Court House—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C. received bids Mar. 27, altering post office and courthouse, from McCann Bldg. Co., 68 State St., $24,790 (90 days); J. Miles & Sons, Worcester, $24,890 (120 days); P. Keeler, 425 Orange St., $28,682 (135 days). Noted Mar. 13.

N. Y., Ft. Lafayette—Dredging—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 31, dredging here and disposing of material in accordance with drawings and specifications, from Auten Engr. & Contg. Co., 29 B'way., New York City, $0.82 (75 days); N. J. Shipbuilding & Dredging Co., foot of East 28th St., Bayonne, N. J., $39,000 (lump sum) (40-50 days). Noted Mar. 20.

★**Pa., Phila.—Dredging** — U. S. Eng. Office, Witherspoon Bldg., let contract dredging in Delaware River, Philadelphia Harbor and New Castle, Reedy, Baker and Liston light house ranges, Sect. 1, to Great Lakes Dredge & Dock Co., 17 Battery Pl., New York City, $0.4775 per cu.yd.; Amer. Dredging Co., Mariner & Merchant Bldg., (2) $0.218 (3) $0.184 (4) $0.21 per cu.yd.; Maryland Dredge & Contg. Co., Fidelity Bldg., Baltimore, Md., (7) $0.25 (8) $0.25 (9) $0.25 per cu.yd.; Morris & Cummings Dredging Co., 17 State St., New York City, (10) $0.33 per cu.yd. Noted Mar. 20.

★**Md., Annapolis**—Seamanship and Navigation Building—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building at U. S. Naval Academy, here, to Levering & Garrigues, 552 West 23rd St., New York City, $662,692 (270 days). Noted Mar. 20.

★**Md., Baltimore**—Foundation and Rip Rap—Lighthouse Inspector let contract building concrete foundation at Tangier Sound Light Sta., Va., to Newport Contg. & Eng. Co., Silsby Bldg., Newport News, Va., $23,750. Noted Jan. 16.

Md., Indianhead — Incinerator — Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 24, building at Naval Proving Ground, (1) price and time (work complete) basing proposal on covering upper walls and roof with galvanized corrugated sheet steel (2) amount added to or deducted from (1) if asbestos protected metal is substituted for galvanized sheet steel on walls and roof, from Borge Incinerator Corp., 1216 Flatiron Bldg., New York City, (1) $6996 (60 days) (2) $648; Sparks Inflammatory Constr. Co., 269 Walnut St., Memphis, Tenn., (1) 5 ton crane, $8633 (60 days) (2) 10 ton crane, $10,140 (60 days); Morse Boulger Destructor Co., 39 Courtland St., New York City, (1) steel stack, $8190 (75 days) iron stack, $8261 (2) add $480. Noted Mar. 13.

★**D. C., Wash.**—Grading—Dist. Comrs., Dist. Bldg., let contract grading and improving streets, roads and avenues, to Continental Contg. Co., 66 Knickerbocker Bldg., Baltimore, Md., $100,000.

★**D. C., Wash.**—Headhouse and Sheds—Dist. Comrs., Dist. Bldg., let contract building 2 story, to W. E. Mooney, Evans Bldg., $50,000. Noted Feb. 27.

★**D. C., Wash.**—Paving—Dist. Comrs., Dist. Bldg., let contract laying Class B asphalt pavement where necessary (during fiscal year ending June 30, 1919) to Cranford Paving Co., 2620 East St., N. W., $100,000. Noted Mar. 13.

★**D. C., Wash.**—Sidewalks—Dist. Comrs., Dist. Bldg., let contract laying cement sidewalks for year ending June 30, 1919, to W. F. Brenizer Co., 101 New York Ave., N. E., $64,000.

D. C., Wash.—Swimming Pools—Dist. Comrs., Dist. Bldg., received bids Mar. 24, building swimming pools at (1) Cardozo Playground, 1st and H Sts., S. W. (2) at Reservation 126, on Virginia Ave. and 10th Sts. S. W., from Carlton Co., Inc., Longacre Bldg., New York City, (1) $11,989 (2) $12,685; S. R. Harris, 2306 1st St. N. W., (1) $9824 (2) $10,412; W. F. Cush, 3rd and R. Sts., N. E., (1) $16,851 (2) $16,506; R. K. Stewart & Son, Farmville, Va., (1) $9650 (2) $10,150. Noted Mar. 20.

Va., Alexandria—Cranes—Bureau Yards & Docks, Navy Dept., received bids Mar. 31, installing 6 "I" beam electric traveling cranes at Naval Assembly plant,

(1) net price and time for 6 cranes complete in accordance with drawings and specification;

(2) net price and time for 6 cranes complete, in accordance with drawings and intent of this specification, but with such modifications as bidder may desire to make. Bids on this item shall be accompanied by complete and detail description and specifications showing wherein bidder's specification differs from this specification, from

Manning, Maxwell & Moore, 119 West 40th St., New York City, (2) $9010 (50 days).

Cameron Eng. Co., East Stroudsburg, Pa., (2) $7760 (90 days).

Euclid Crane & Hoist Co., Chardon Rd., Euclid, O., (1) $9190 (90 days).

Niles-Bement-Pond Co., 111 Bway, New York City, (1) $12,830 (90 days).

Pawling Harnischfeger, 38th St. and National Ave., Milwaukee, Wis., (2) $11,160 (90 days). Noted Mar. 20.

★**S. C., Paris Island**—Extension to Fresh Water System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract to G. E. Eng. Co., 417 Canal St., New York City, $10,590 (75 days). Noted Mar. 13.

★**Fla., Pensacola**—Boat Shed and Basin—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract building here, to Newport Eng. & Contg. Co., Law Bldg., Newport News, Va., $47,100 (120 days). Noted Mar. 6.

Fla., Pensacola—Power Plant Improvements—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 31, building at Naval Air Sta.,

(1) net price and time for work, complete, in accordance with drawings and specification;

(2) net reduction in price and time from (1) for omitting provision and installation of feed water heater and its connections;

(3) net reduction in price and time from (1) for omitting provision and installation of 250 gal. per minute circulating pump and its piping and electrical connections;

(4) net reduction in price and time from (1) for omitting feed water meter and its connections, from

Carroll Electric Co., 714 12th St., N. W., Wash., D. C., (1) $54,500 (150 days); (2) $1500; (3) $500; (4) $1000.

Lord Constr Co., 105 West 40th St., New York City, (1) $69,467 (135 days), (2) $1284; (3) $936; (4) $845.

J. W. Danforth Co., 72 Ellicott St., Buffalo, N. Y., (1) $69,990 (150 days); (2) $2000; (3) $735; (4) $1000. Noted Mar. 13.

O., Akron—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids altering post office, from W. MacDonald Constr. Co., St. Louis, Mo., $10,165; W. Grohne Co., Joliet, Ill., $10,736; S. D. Brady, Trust Bldg., Franklin, Pa., $19,443. Noted Mar. 6.

Mont., Great Falls—Roads—Bureau Pub. Rds., Missoula, received bids building 18.9 mi. Belt Creek Natl. Forest Rd., Cascade Co., from White & Brown, Great Falls, $103,488; Rich & Markhus, Prosser, $108,398; Tupper, Renshaw & Wall, Roundup,

Tex., Point Isabel—Radio Buildings—Pub. Wks. Officer received bids Mar. 22, building at St. Joseph, from Eagle Pass Lumber Co., Brownsville, (1) $18,293 deduct $370 if not painted (120 days); H. L. Fitch, 8th and Railroad Sts., Brownsville, (1) $20,739 (2) $18,640 (3) $320; J. McCoy, Monroe and 10th Sts., Brownsville, (1) $16,844 (100 days); Krahl Constr. Co., 350 North Clark St., Chicago, (1) $28,279 (85 days) (2) $22,995 (3) deduct $200 (4) $3491 (5) $1793.

Okla., Woodward — Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., D. C., received bids Mar. 19, (1) limestone (2) sandstone, from C. E. Goodhand, Chadron, Neb. (1) $95,000; Henry & Hatfield Constr. Co., Indianapolis, Ind., (1) $98,206 (2) $99,405; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., (1) $102,450. Noted Feb. 20.

Cal., Mare Island—Fuel Oil Storage Plant—Bureau Yards & Docks, Navy Dept., Wash., D. C., received bids Mar. 24, building storage plant.

(1) 43,830 cu.yd. excav., including back fill and grading, item includes clearing of sites, excavation, back fill, and grading for following items: concrete oil-storage reservoirs, pump well at storage reservoirs, and connecting tunnel between reservoirs and pump well.

(1a) 730 cu.yd. grading crest of hill, item includes excavation and grading required to remove crest of hill between steel tanks.

(2) 4200 cu.yd. 1:2:4 concrete, item includes concrete work for rein.-con. fuel-oil reservoirs and the pump well.

(3) 450,300 lb. reinforcement, item includes reinforcing material required for reinforced concrete covered by (2).

(4) miscellaneous metal work, item includes ventilators and manholes for reservoirs, ladders in reservoirs, pipe-coil supports in reservoirs, and all other miscellaneous metal work in reservoirs not otherwise specified,.

(5) buildings, item includes excavation, filling and grading, and materials and construction for following: boiler house, heater house on wharf, house over pump well, pits for valves, expansion bends and joints, two sludge pits, and foundations for steel residue tank.

(6) mechanical and electrical equipment; item includes equipment for boiler house, pump well, heater house on wharf, steel residue tank, and all other mechanical and electrical equipment not covered by other items and necessary for completed plant whether or not shown on drawings or mentioned in this specification.

(7) Piping: item includes excavation and back fill for and provision and installation of all water, steam, exhaust, oil, and drip piping, except piping in the boiler house; foam solution piping inside reservoirs including standpipes and terra cotta drain piping, all as shown or indicated on drawings, or necessary for the complete installation.

(8) piping in boiler houses, item includes all steam, exhaust, drip, water, boiler feed, oil and blow-off piping and accessories in the boiler house, other than special fittings in piping in connection with mechanical equipment, which shall be covered by (6).

(9) lighting and power; item includes transformers, wiring, piles, fixtures, and accessories for lighting and power systems, complete in every respect, omitting all wiring and fixtures in connection with foam fire protection system.

(10) tests; these include testing of pumping plant and heating system.

(11) gravity foam fire protection system, item includes entire gravity foam system complete including steam and water lines up to tanks, electric control system and all piping and special valves. Bids on this item shall be divided as indicated on special offer sheet.

(12) amount deducted from (6), if one 1000 gal. pump and turbine is omitted from pump well, leaving blanked connections for its future installation,

(13) amount deducted from (6), if one 1000 gal. pump and turbine is omitted from wharf, leaving blanked connections for its future installation,

(14) amount deducted from (9), if all outside lighting is omitted, from

Carroll Electric Co., 714 12th St., Wash., D. C., (1) $.75; (1a) $2.00; (2) $16.00; (3) $.08 (4) $4.200; (5) $48,600; (6) $30,000; (7) $107,000; (8) $500; (9) $5200; (10) $2000; (11) $50,000; (11a) $23,000; (11b) $10,000; (11c) $2400; (11d) $14,000; (11e) $600; (14) $2500. 210 days.

Lindgren & Co., Monadnock Bldg., San Francisco, (1) $1.27; (1a) $.60; (2) $18.50; (3) $5.95; (4) $2500; (5) $34,919; (5a) $.50; (6) $93,430; (7) $110,606; (8) $9450; (9) $7340; (10) $1500; (11) $37,630; (11a) $8180; (11b) $9200; (11c) $7750; (11d) $12,000; (12) $15,200; (13) $14,700; (14) $3000. 210 days.

C. Moore & Co., Shelden Bldg., San Francisco, (1) $.93; (1a) $.63; (2) $17.01; (3) $.0567; (4) $2400; (5) $30,923; (5a) $.36; (6) $110,970; (7) $107,156; (8) $6228; (9) $7630; (10) $1417; (11) $36,140; (11a) $8502; (11b) $17,993; (11d) $1443; (11) $7984; (11e) $218; (12) $14,835; (13) $14,178; (14) $1100. 210 days.

J. W. Danforth Co., 72 Ellicott St., Buffalo, N. Y., (1) .92; (1a) $.10; (2) $16.65; (3) $.053; (4) $2100; (5) $33,172; (5a) Add $ 33-$.22. Dect. (7) $114,000; (8) $10,000; (9) $6900; (10) $1500; (11) $43,448; (11a) $7255; (11b) $21,450; (11c) $2233; (11e) $250; (12) $16,145; (13) $15,025; (14) $3300. 210 days.

Lange & Bergstrom, Sharon Bldg., San Francisco, (1) $1.25 (1a) $1.25 (2) $16 (3) $6.25 (4)$2000 (5) $37,100 (5a) add $.45 deduct $.23 (6)$94,000 (7) $92,100 (8) $8500 (9) $9000 (10) $1000 (11) $40,000 (11a) $88,000 (11b) $22,000 (11c) $1400 (11d) $7500 (11e) $300 (12) $15,878 (13) $15,131 (14) $3100 (210 days).

Almiral & Co., 1 Dominick St., New York City, (1) $1.12 (1a) $.89 (2) $16.43 (3) $.056 (4) $1979 (5) $32,784 (5a) under 40 ft., $.24 over 40 ft., $.42 (6) $98,925 (7) $98,955 (8) $9757 (9) $9102 (10) $1069 (11) $36,587 (11a) $8935 (11b) $14,172 (11c) $1819 (11d) $11,186 (11e) $275 (12) $16,400 (13) $15,858 (14) $3360 (270 days). Noted Mar. 13.

★**Cal., San Diego**—Gasoline Storage and Supply System—Bureau Yards & Docks, Navy Dept., Wash., D. C., let contract, to T. Havery Co., 517 South Los Angeles St., Los Angeles, $15,875 (60 days). Noted Feb. 6.

Miscellaneous

PROPOSED WORK

Broken Stone, etc.—New York, N. Y.—C. D. Van Name, pres. Richmond Boro., rejected bids received Mar. 11 furnishing and delivering 800 cu.yd., 1½ in. broken stone, 300 cu.yd. screenings and 100 cu.yd. ¾ in. broken stone of trap rock in Dist. 1; 1900 cu.yd. 1½ in. broken stone, 750 cu.yd. screenings and 100 cu.yd. ¾ in. broken stone of trap rock in Dist. 2; 1250 cu.yd. 1½ broken stone, 550 cu.yd. screenings and 60 cu.yd. ¾ in. broken stone of trap rock in Dist. 3. Noted Mar. 13.

Garbage Disposal Plant — Rochester, N. Y.—City plans to build and equip garbage disposal plant. Cobwell Corp. will install $300,000 equipment and run plant if city will furnish building and site.

Paving Materials—Rochester, N. Y.—Bd. Contr. & Supply soon receives bids furnishing 4500 tons asphalt material and 2000 tons crushed stone for road repair work. A. C. Poole, city engr.

Monument—Hoboken, N. J.—City plans to build soldiers and sailors monument in Elysian Park on 11th and Hudson Sts. About $40,000.

Docks and Port—Jersey City, N. J.—City plans to purchase 100 acres of land on Hackensack River between Bayonne Line and Newark and New York branch of Central R. R. of N. J. and with land already owned will build docks and port. Work involves 400,000 cu.yd. fill.

Pipe, etc.—Richmond, Va.—Dept. Pub. Wks. soon lets contract furnishing and delivering vitr. pipe, c.i. frames and covers, stakes, hubs, etc. C. E. Bolling, dir.

Jetties—Sebastian, Fla.—St. Lucie and Broward Counties plan election to vote on $50,000 bonds to build jetties on Sebastian inlet.

Earthwork—Bellevue, O.—Dir. Pub. Serv. receives bids about May, for new reservoir to have 1,000,000 gal. capacity (earthwork only). About $135,000. W. G. Clark, 1047 Spitzer Bldg., Toledo, engr.

Dock—Manitowoc, Wis.—Eastern Wisconsin Electric Co., 428 North 8th St., Sheboygan, plans to tear down old coal dock here and build modern structure. About $150,000. Kelsey Brewer Co., La Crosse, engrs.

Pavilion—Iowa City, Ia.—Iowa City Stock Pavilion Assn., c/o W. Casey, plans to build stock pavilion. About $15,000.

Dock, St. Louis, Mo.—Denero Realty & Mfg. Co., 6900 South Bway., soon receives bids building river dock and addition to farm tractor manufacturing plant. About $150,000. Address C. E. Hayden, 3400 Maury Ave.

Wharves and Docks—Orange, Tex.—City plans to build wharves and docks. Bonds for $150,000 voted for project. Noted Jan. 2.

Monument—Oklahoma, Okla.—State Legislature appropriated $50,000 to build memorial monument on capitol grounds here.

Channel—Kelso, Wash. — Cowlitz Co., (Kalama) and State Highway Comn., Capitol, Olympia, plan to cut channel in Lewis River at Robinson Bend and close old channel. State appropriated $10,000 toward cost. A. Cramer, co. engr.

Gantry Crane — Seattle, Wash. — Port Com. of Port of Seattle Bell St. Warehouse, Bell St., rejected all bids received Feb. 18, furnishing and installing gantry crane, Smiths Cove Impvt. Pier B. Noted Feb. 27.

Pier Extension—Astoria, Ore.—Port of Astoria plans to build 300 ft. extension to Pier 1, to provide uniform entrance facade with space above for offices. R. R. Bartlett, engr.

Bulkheads—Marshfield, Ore.—Port of Coos Bay Comrs. having preliminary plans prepared building several bulkheads in upper Coos Bay; also dredging 18 ft. channel between Smith's mill and bar.

Tanks—Pendleton, Ore.—See "Industrial Works."

Drydock—Portland, Ore.—Pub. Dock Comn. plans to build 12,000 ton drydock. About $1,250,000. G. B. Hegardt, ch. engr.

Tunnel—Portland, Ore.—City considering plans for tunnel through Council Crest connecting Tualitin Valley with city. Cost between $1,500,000 and $2,000,000. O. Laurgaard, city engr.

Dam—Cal., Modesto—Modesto and Turlock Irrigation Dists. plan election to vote on $3,439,000 bonds for Don Pedro Dam project. Plans include construction of concrete arch dam, 279 ft. high, 177 ft. wide, 4 mi. above La Grande dam, cost, $2,787,000; 8 mi. railway from Rosasco to dam site, $93,000; building hydroelectric plant to develop 18,000 h.p. or 12,000 k.w., $609,000. Noted Jan. 30.

Amusement Pier — Seaside, Ore. — City having plans prepared by G. W. Boschke, city engr., for concrete and timber amusement pier, 2000 ft. long, 100 ft. wide, on Bway. St. extending into ocean. About $65,000.

Park Improvements—Edmonton, Alta.—City plans to improve parks to include pavilion and swimming pools. About $30,000.

BIDS DESIRED

Paving Materials—Providence, R. I.—Until Apr. 11, by State Bd. Pub. Wks., State House, furnishing and delivering 90,000 gal. asphalt in wooden barrels or metal drums.; advertised in this issue.

Culverts—Lockport, N. Y.—Until Apr. 11, by L. Nixon, supt. pub. wks., Capitol, Albany, building concrete culvert over Eighteen Mile Creek, Niagara Co. About $10,805. Work involves 3500 cu.yd. excav., 13,000 ft. sheathing 3500 cu.yd. forming embankments, 490 cu.yd. concrete, 16,000 lb. steel reinforcement, etc.

Freight Shed—New York, N. Y.—Until Apr. 29, by L. Nixon, supt. pub. wks., Capitol, Albany, building barge canal terminal freight shed on Pier 93, West 53rd St., North River, Contr. 218 Work involves 366,000 lb. structural steel, 1635 sq.ft. solid metal windows, 6580 sq.ft. corrugated metal siding, 3980 sq.ft. flashings, 14,060 sq.ft. roof covering, etc. About $53,969; advertised in this issue.

Sanitary Work—Willard, N. Y.—Until Apr. 9, by State Hospital Comn., Capitol, Albany, for chlorinating plant at Willard State Hospital here; advertised in this issue.

Paving Material — Maplewood, (South Orange P. O.), N. J.—Until Apr. 11, by Twp. Com. of South Orange, here, furnishing 500 tons 1½ in. and 1000 tons, ¾ in. traprock and 1000 tons screenings. E. R. Halsey, 164 Market St., Newark, engr.

Crushed Stone, etc.—Wilmington, Del.—Until Apr. 8, by Pres. Levy Court, County Bldg., furnishing crushed stone, gravel, slag, road tar and oils, asphalt, etc., f.o.b. at plant and at different railroad stations in county; for sweeping and applying road tar and asphalts; hauling crushed stone, gravel and slag from railroad stations to different roads. C. E. Grubb, co. engr.; advertised in this issue.

Conduits, etc. — Baltimore, Md. — Until Apr. 9, by R. Gwinn, city register, furnishing 100,000 ft. single duct conduit and 100,000 ft. special duct pipe and bends.

Levee—Port Allen, La.—Until Apr. 21, by Bd. State Engrs., 213-215 New Orleans Court Bldg., New Orleans, building part of Port Barre South Levee, in Parish of St. Martin, extending from embankment of Baton Rouge Branch of Southern Pacific R. R. to lower side of Cypremort Bay. Work involves about 400,000 cu.yd. earth embankment. T. G. Erwin, secy.

Mixer, etc.—Detroit, Mich.—Until Apr. 8, by Bd. Water Comrs., 232 Jefferson Ave., furnishing one batch concrete mixer, 1-3 yd. capacity with charging hopper, one stone crusher, mounted on truck with or without elevator, one power hammer suitable for forging iron up to 3 in. diam.

Pipe, etc.—Detroit, Mich.—Until Apr. 15, by Bd. Water Comrs. 232 Jefferson Ave., furnishing one hundred fifty 4 in. gate valves, c.i. suction elbows, 54 in. diam., 15 ft. high, and 1200 ft. 36 in. Class C. [illegible] water pipe.

Pipe, etc., Kansas City, Mo.—Until Apr. 9, by J. R. Samuel, city purch. agt., for manufacture and delivery f.o.b. cars in Kansas City, Kans., on such railroad switches as Bd. Fire & Water Comrs. may designate, and furnishing and laying 8000 lin.ft. 48 in. steel pipes and specials; 8000 lin.ft. 48 in. concrete pipe and special and 8000 lin.ft. 48 in. wood pipe and specials; advertised in this issue.

Road Oil—Winnipeg, Man.—Until Apr. 8, by C. J. Brown, city clk., furnishing 5 to 10 tank cars road oil of 40% and 60% asphaltic base (paraffin base will not be considered).

PRICES AND CONTRACTS AWARDED

(★Indicates Award of Contract)

★**Dam, etc.—New Haven, Conn.**—City let contract building rein.-con. dam and retaining walls on West River, south of Congress Ave., to C. W. Blakeslee Co., 58 Waverly St., $41,124. Work involves 22 ft. abutments on either side of river, 7 ft. wide to include concrete pier in center of river, etc. Noted Mar. 20.

Conduits, Cables, etc.—New York, N. Y.—Fire Dept. received bids Mar. 31, furnishing, delivering and installing conduits, cables, etc., at Transverse No. 2, Central Park, from Bates Co., 2 Rector St., $40,207; Croker Natl. Fire Prevention Eng. Co., 1270 Bway., $41,225. Noted Mar. 13.

Heating and Ventilating Apparatus—New York, N. Y.—Bd. Educ. received bids installing heating and ventilating apparatus in P. S. 40, from D. J. Rice, 42nd St. and Lexington Ave., $62,173; Gillis & Geoghegan, 537 West Bway., $66,478; Teran, Mahaney, Monroe, Grand Central Terminal, $67,300.

★**Paving Blocks—New York, N. Y.**—F. L. Dowling, pres. Manhattan Boro., let contract furnishing and delivering 630,000 granite paving blocks, to W. J. Fitzgerald, 547 West 45th St., $13,860. Noted Mar. 27.

Rebuilding Crib Bulkhead—New York, N. Y.—Park Bd. received bids Mar. 27, rebuilding upper portion of crib bulkhead along water front of Thomas Jefferson Park, between 111th and 114th Sts., from P. J. Kerns, 2306 Creston Ave., $15,820; I. J. Stander & Co., 118 East 28th St., $15,980; F. Gradwohl Eng. & Contg. Co., 280 Madison Ave., $16,168. Noted Mar. 20.

★**Structural Steel—New York, N. Y.**—Pub. Serv. Comn., 49 Lafayette St., received bids erecting structural steel on Sect. 2, Routes 19 and 22, 7th Ave.-Lexington Ave. Rapid Transit R. R., from O. Daniels, Woolworth Bldg., $583,125; Terry & Tench, Grand Central Terminal, $586,700; Snare & Triest, Woolworth Bldg., 695,473. Noted Mar. 20.

Pipe—Johnstown, Pa.—See "Streets & Roads."

Column Foundations — Phila., Pa.—W. S. Twining, dir. dept. city transit, Mershon Bldg., 1211 Chestnut St., received lowest bids Mar. 25 building 68 concrete column foundations on Front St., from above Arch St., to Callowhill St., on Frankford Elevated Ry., from Brown-King Constr. Co., Commercial Trust Bldg., $29,800; I. K. Davis Co., 20th and Spencer Sts., $32,900; Keystone State Constr. Co., Franklin Bank Bldg., $36,900. Noted Mar. 13.

★**Wharf, etc.—Claiborne, Md.**—See "Excavation and Dredging."

Paving Materials—Detroit, Mich.—Dept. Purchases & Supplies, 1302 Real Estate Exch. Bldg., received bids furnishing 75,000 bbls. Portland cement, (a) paper sack per bbl.; (b) cloth sack per bbl.; (c) in bulk per bbl., from Wabash Portland Cement Co., 1824 Ford Bldg., (a) $2.34; (b) $3.04; Huron Portland Cement Co., 1525 Ford Bldg., (a) $2.57; (b) $3.27; (c) $2.22; J. Calvert Sons, 6 McGraw Bldg., "Burt Brand", (a) $2.47; (b) $3.17; Parker Bros., 15 Atwater St., "Michigan Brand", (a) $2.52; (b) $3.22; Wyandotte Portland Cement Co., Wyandotte, (a) $2.47; (b) $3.17; (c) $2.12; 3000 sq.yd. creosoted blocks, (a) 3½ x 12 rect. blocks per sq.yd.; (b) 3½ x 16 rect. blocks; (c) 3½ x 12 lug; (d) 3½ x 16 lug, from Jennison-Wright Co., 2463 Bway., Toledo, O., (a) $2.09; (b) $2.21; (c) $2.19; (d) $2.31; Southern Wood Preserving Co., Ft. McPherson St., Atlanta, Ga., (a) $2.17; Republic Creosoting Co., 1614 Merchants Bank Bldg., Indianapolis, Ind., (a) $2.085; (b) $2.22; (c) $2.085; (d) $2.22; Compressed Wood Preserving Co., 4665 Spring Grove Ave., Cincinnati, O., (b) $2.30; 15,000 tons more or less, crushed stone ½ in., 1 in. and 2½ in. in size f.o.b. cars, from Solvay Process Co., Delray, $1.40 per ton; Dunbar Stone Co., [illegible] Rouge, $1.30 per ton; France Stone Co., Zug Island, $1.40 per ton. Noted Feb. 7 and 20th.

★**Rip Rap—Galveston, Tex.**—City let contract furnishing rip rap for sea wall, to Dittlinger Lime Co., New Branfels, $14,632.

★**Dam—Junction, Utah**—State Land Bd., Salt Lake let contract raising, enlarging and reinforcing Piute Dam, to Heiselt Constr. Co., Salt Lake City $59,105. Work involves 2500 cu.yd. earth excav., 100 cu.yd. rock excav., 83,000 cu.yd. earth fill and 165 cu.yd. mass concrete.

Piers—Jellicoe, Ont.—See "Railways, under Ontario."

Subway, Foundation, etc.—St. Boniface, Man.—Provencher Bridge Com. received bids Mar. 20, building steel superstructure for Water St. subway, from Dominion Bridge Co., Ltd., Canada Bldg., Winnipeg; substructure, from Progress Constr. Co., St. Boniface. Noted Mar. 6.